

BUSINESS WEEK

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START
OF WAR
1939



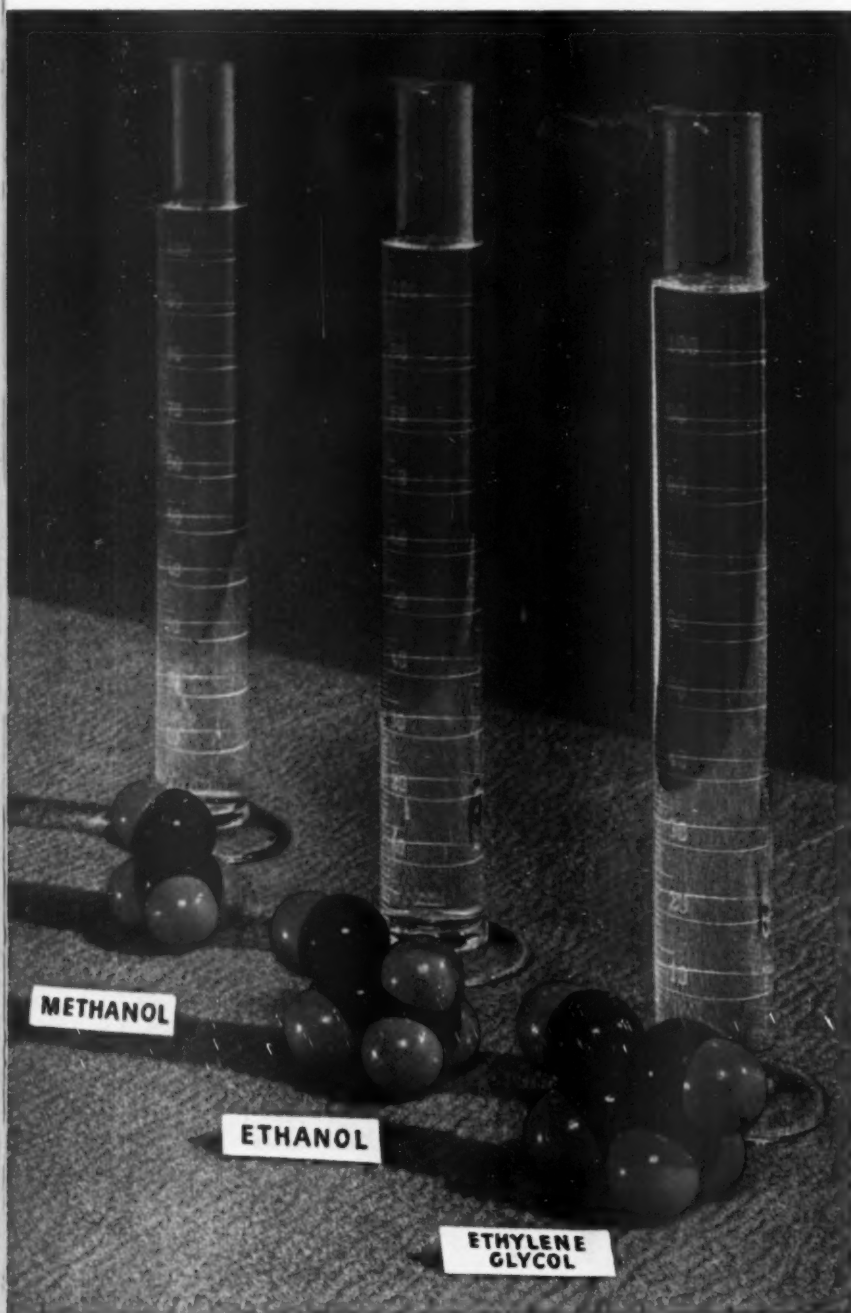
W. Averell Harriman: Railroader at home, presidential proxy at Moscow.

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DEX

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Chemicals that protect your car!



HERE ARE THREE CHEMICALS that you are probably better acquainted with from the way they act as anti-freeze in your car than from the way they look in print.

These chemicals are manufactured in large quantities by CARBIDE AND CARBON CHEMICALS CORPORATION. Uncolored, they are water-white. To the chemist who must know what they will do in your car, they are compounds of Carbon (the atoms of which are shown here in the molecular models in black), hydrogen (orange), and oxygen (blue).

ETHYLENE GLYCOL, ETHANOL and METHANOL are the bases of anti-freezes, and they help to take one of the worries out of winter for millions of motorists.

TODAY AND TOMORROW

Over the years, CARBIDE AND CARBON CHEMICALS CORPORATION and other Units of UCC, notably NATIONAL CARBON COMPANY, INC., have kept at their research—both in the laboratory and on the road—for the constant improvement of anti-freeze and anti-rust protection for your car. This is an important reason why you can depend on the following whenever and wherever you find them:

"Prestone" ethylene glycol-base anti-freeze. One "shot" gives all-winter protection.

"Trek" methanol-base anti-freeze, which is again available to the extent that the production of methanol has caught up with its war-critical uses.

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Certain other anti-freezes formulated and manufactured by Units of UCC for large national distributors.

"Rustone" corrosion preventive which, when added to the water in a clean cooling system, inhibits the formation of rust.

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Flexible Reconversion

V-E Day on the home front may not be a single date but a three-or-four-month period preceding the actual military collapse of Germany. If the European war drags on into winter or spring, Washington won't stand out against the rising pressure for action on reconversion policies concerning boosts in wage rates, relaxation of manpower controls, resumption of civilian production, and setting the level of new goods. Pinning these reconversion measures on a final military victory was acceptable in the country when that seemed closer than it now does. If Germany holds out, officials are prepared to approach reconversion on a step-by-step basis.

Rolling the Wage Issue

Scarcely a shred of doubt remains that President Roosevelt will be able to stall the wage issue until after election day. He could and doubtless would have taken the line before now if the prospect of Germany's defeat had continued to look as rosy as it did in September (BW-Oct. 14 '44, p5). The break in the wage line nevertheless is almost certain to come ahead of Germany's collapse. The expectation is that Roosevelt will try to wait until victory again seems imminent, in order to avoid the risk of inflation due to the assurance that a general wage increase, more employment slackens, would put upward pressure on prices. But if V-E Day is too long coming, labor's rank and file will make the Little Steel formula too hot for him to hold. Labor leaders have been stringing him along with him, reluctantly, to save him from embarrassment during the election campaign.

More Time for Planning

Each week of delay in Germany's fall has two effects:

- (1) More actual reconversion and reconversion planning will have been done.
 - (2) When V-E Day does come, industry will consequently be able to take cutbacks and switch over to civilian production with much less loss in volume output.
- For example WPB and the War Relocation Authority are getting together on a program that will give wider scope to the spot authorization plan, permitting resumption of civilian

goods manufacture in areas of relatively easy labor supply (BW-Jul. 22 '44, p15).

WPB also is trying to forestall a jam in the demand for machine tools after V-E Day by urging manufacturers to place orders now for tools they will find essential to reconversion.

And OPA, which had planned to postpone announcement of a reconversion pricing formula until V-E Day (BW-Sep. 9 '44, p7), may be forced to move sooner as the number of scattered reconversions becomes too large for case-by-case treatment.

Analysis of Cutbacks

Around the end of this month, WPB's statisticians will have completed the first detailed analysis of just how cutbacks now planned will hit specific industries and specific regions. Figures used so far—even the prediction of a 40% over-all cutback which WPB officially announced (page 9)—have been statistical makeshifts. Experts say they are more misleading than useful in reconversion planning.

Once it gets the precise cutback estimates, WPB can start work on detailed plans to prevent bottlenecks and help industries threatened with shortages.

Subcontract Data Needed

In almost all important industries, cutbacks of prime contracts will be enough to free ample capacity for resumption of civilian work.

In the automotive industry, for example, the cut will amount to 40% of present delivery rates; in radio manufacturing, 68%; in railroad equipment shops, 61%.

What these figures don't show is how the subcontract load will be cut and how the supply of components will be affected. That is precisely what WPB has to know before it can plan for a smooth reconversion.

Termination Shortcut

War Dept. contract termination officials are trying to get official sanction for an extra-simplified system for handling settlements when comparatively small orders are canceled. The idea is that the contractor would file no claim for immediate settlement but would bring in his figures and ask for an adjustment when his business for the year was renegotiated.

Contractors have been doing this

more or less informally right along. Out of the 19,000 terminations closed by Aug. 1, 14,000 had resulted in no claims. The biggest hitch at present is that renegotiation officials haven't formally agreed to take account of termination losses in their determination of excessive profits.

Procurement officers also are thinking of making a deal with the Bureau of Internal Revenue to allow unreimbursed termination losses as deductions from taxable income. This would be contrary to the bureau's ordinary policy, but revenue officials have the whole question of contract termination under study and might be willing to strike a bargain.

Surveying WPB Controls

WPB's legal experts are taking a quick look at all its production controls to make sure that they conform to the demobilization law recently passed by Congress (BW-Sep. 30 '44, p17).

The demobilization law specifically outlaws the "grandfather" principle in reconversion, which means that WPB cannot exclude newcomers when it permits civilian production to be resumed or expanded. This has the incidental effect of prohibiting WPB from allocating materials for new civilian work entirely on the basis of consumption or output in some prewar base period.

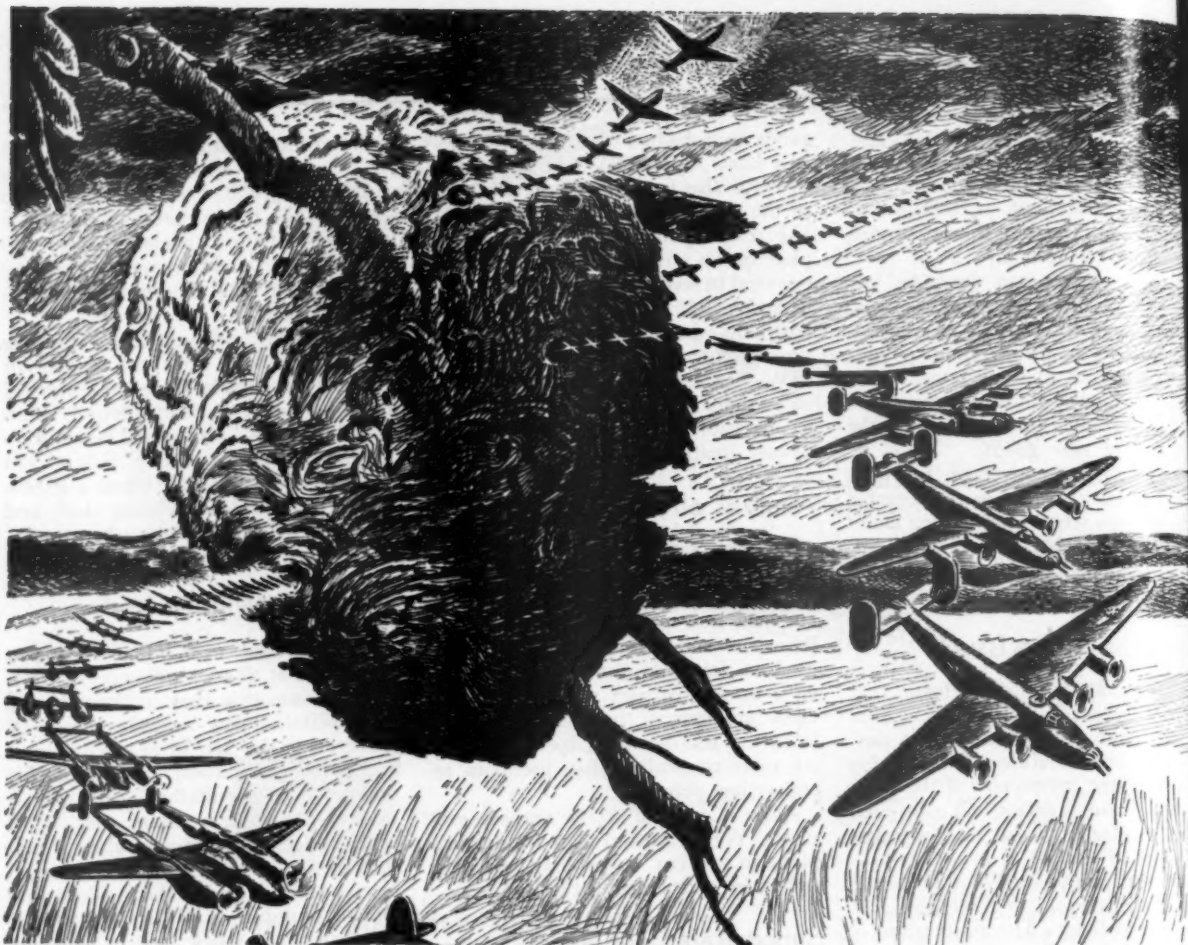
Although WPB often has used variations of the base-period allocation system, experts think the new law will cause it little trouble. WPB had already decided to scrap the grandfather principle (BW-Mar. 18 '44, p15). Where it wants to use base-period allocations, it can comply with the law by making some arbitrary provision for newcomers. Most of its orders already include this feature.

Shift of Power Studied

Some of WPB's production and distribution controls may be shifted to OPA following V-E Day, because they may still be deemed essential to effective price control even though no longer needed to conserve materials, manpower, and facilities for the prosecution of the war.

A joint WPB-OPA committee is now going over all WPB orders which may be lifted after the victory over Germany, dividing them into three broad categories:

- (1) Those which can be entirely with-



MODERN MIRACLE: in 5 years the U. S. Aviation Industry jumped from 17th to 1st place among all the nation's industries! Shell participated by supplying 19 Aircraft and Engine manufacturers with Shell Industrial Lubricants.

STINGERS

**3,623 combat planes produced in 1939
110,000 in 1944!**

In 5 years, by a production miracle the Aviation Industry has multiplied annual output 30 times—turning out an average of 276 planes every day in 1944! We now have enough planes to give us complete and devastating air superiority—and our output rate is still climbing!

Shell's contribution to this production miracle was the development of special industrial lubricants to meet specific needs. For example, one lubricant stepped up cutting speed and at the same time substantially increased tool life. Another reduced drill breakage—lessened operator fatigues. Other Shell Industrial Lubricants

helped a major manufacturer achieve one of the lowest maintenance costs in the industry.

As war production enters the final phase, proper lubrication becomes more vital. Yesterday's solution is seldom good enough for today!

Constant improvement in lubrication is a major responsibility of the "University of Petroleum," Shell's research laboratories. Shell engineers apply these improvements in the field.

Are you sure your plant has the benefit of all that is new in lubrication as it develops? Call the Shell Lubrication Engineer.



First oil refinery to win the Army-Navy "E"—Shell's Wood River Refinery



**LEADERS IN WAR PRODUCTION RELY ON
SHELL INDUSTRIAL LUBRICANTS**

men with no danger to price control. (2) Those in which controls might wholly or partially switched to OPA. The point here is that WPB's powers in many respects are considerably broader than OPA's, which have been periodically clipped by Congress. (3) Those which cannot be revoked without seriously endangering price con-

Factors in Demand

WPB's requirements committee is considering the refrigeration industry's demand that it be granted a special priority rating for fractional horsepower motors and other components which it could then stockpile against the day when civilian production can be resumed.

If they don't get such a rating, refrigerator makers argue, manufacturers of less-essential civilian goods who have been able to go ahead under the spot authorization plan will tie up available supplies of scarce components, leaving nothing for refrigerators when WPB finally gives them go-ahead.

Since the stockpile of prewar refrigerators is so low that it will just about last the year out, with careful rationing of such essential users as hospitals and food banks, many WPB officials are sympathetic to the industry's demand. But the Army and Navy are still wary of letting companies as big as the refrigerator makers get a foot in the reversion door (BW—Sep. 23 '44, p8).

The Army also is holding up manufacture of some 300,000 steel iceboxes, although manufacturers claim that they can get sufficient sheet steel from idle and excess inventories.

The present law does not authorize FPC to consider the competitive fuel situation in deciding whether to issue a certificate.

Lumber Rules Eased

WPB has discovered that its system of end-use control over lumber (BW—Jun. 2 '44, p17) is working a little too well. The rigid certification procedure of L-335, the master lumber regulation, has cut orders for some species to the point where lumber is backing up at the mills. Small mills have threatened to cut production or go out of business.

Now WPB is easing its controls on slow-moving species.

Its latest amendment allows mills and distributors to fill unrated, uncertified orders for the more plentiful species, including all hardwoods. This will go a

long way toward satisfying furniture manufacturers and other big wood fabricators who have been pushing WPB to take hardwoods out from the regular lumber allocation system entirely.

They have argued that hardwoods constitute only about 20% of lumber consumption, that the supply situation is much better than in softwoods, and that hardwood and softwood are not interchangeable for most purposes.

British Ask Antitrust Delay

Through diplomatic channels, the British have requested deferments until after the war of trials of antitrust suits in which British companies are defendants. State Dept., however, has not put any pressure on the Dept. of Justice to accede to such requests.

A possible reason for the delay is that State is using the threat of present and prospective antitrust actions (page 15) to persuade the British to accept this government's postwar policy on international cartel operations.

RAIL RATES IN DOUBT

Outcome of the rail rate controversy now pending before the Interstate Commerce Commission (BW—Oct. 14 '44, p21) is anybody's guess. When OPA succeeded in getting the 4.7% emergency freight rate boost suspended in 1943, the commission split five to five. The late Commissioner Joseph B. Eastman came back from the Office of Defense Transportation to cast the deciding vote for suspension.

Since then, the suspension has been renewed without protest from the railroads. It might have been renewed again if two associations of state railroad commissioners hadn't kicked over the applecart by proposing that the rate increases be revoked entirely (BW—Oct. 14 '44, p21). With Eastman's successor not yet confirmed by the Senate, the commission still is evenly split.

OPA has chimed in, urging not only that the suspended freight rate boosts be ditched but also that the 10% passenger fare increase, which has been in effect since 1942, be revoked. Their hand forced by the state commissioners, the roads are petitioning for restoration of the freight increase.

Like the carriers, OPA would have been happier to leave the rate issue alone for the present.

Subsidy for Textile Exports

Officials of the Commodity Credit Corp., meeting this week with cotton merchants and exporters, agreed to subsidize exports of cotton textiles as well as the raw fiber under provisions of the surplus property disposal law. Similar agreement was reached last week on wheat flour and semolina.

At present world prices the export subsidy on raw cotton would average 4¢ a lb., applicable to about 1,000,000,000 lb., and on wheat about 40¢ a bu. on 70,000,000 bu.

Final approval of the export program will rest with the Director of Economic Stabilization, Fred M. Vinson.

Natural Gas Probe Slated

The Federal Power Commission, which has been having its troubles administering the natural gas act, finally has decided to launch a general investigation of natural gas production and utilization. Object is to get a complete picture of the industry and to lay the foundation for revision of the 1938 law.

Under the natural gas act, FPC must hold hearings and grant a certificate of necessity before any gas pipeline can be extended or a new line built. Recent hearings have produced some hot sessions, with conservationists, transportation interests, and producers of competitive fuels all pulling in different directions.

Better Planes Urged

Personal plane manufacturers must improve aircraft designs if they hope to create a sizable postwar market (BW—Aug. 5 '44, p38). This was the tenor of T. P. Wright's first public statement as Civil Aeronautics Administrator.

Some manufacturers have low price, some have safety, and some have utility, but none, according to Wright, has the three-way combination that will bring the industry sales of 175,000 units a year in five or ten years.

This figure is the goal held up to the industry by Wright, former Curtiss-



Chicago Plant of the H. J. Heinz Co.

Heinz Knew in Advance

how much Iron Fireman would cut fuel bills

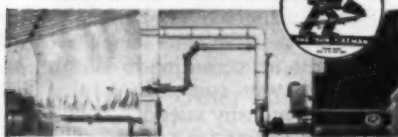
THE H. J. Heinz Company knew in advance how much it would save with an Iron Fireman stoker. The facts were determined in a survey by Iron Fireman's widely experienced engineering staff . . . the same kind of survey which we are ready to make for you at our expense.

Iron Fireman's seven-year performance record in the Heinz Chicago Plant includes: uniform temperature regardless of weather; minimum boiler room labor; no smoke nuisance; and use of money-saving sizes and grades of coal.

Iron Fireman stokers in many sizes and models meet the most varied needs for power, heating and processing. A fully qualified Sales-Service-Engineering network covers the continent. Write Iron Fireman Manufacturing Company, 3157 West 106th Street, Cleveland 11, Ohio. Other plants in Portland, Oregon; Toronto, Canada.

IRON FIREMAN

Automatic Coal Stokers



IRON FIREMAN PNEUMATIC SPREADER STOKER meters steam size coal to the furnace on a stream of pre-heated air. Conveyor nozzle accurately distributes coal over the entire grate on a shallow fuel bed, the fines burning in suspension. Combustion efficiency is greatly improved over stokers which do not preheat the fuel.

Wright director of engineering, who handled scheduling of military aircraft production until it went over the hump (BW—Aug. 26'44, p7).

WFA Blocks Cotton Racket

A hundred thousand bales of low-grade Mexican cotton are waiting below the Rio Grande to slip into the U. S., to lose their identity ultimately and be exported as American cotton.

That's why the War Food Administration issued an order this week requiring WFA licensing of warehouses storing foreign cotton in bond in this country. Fifty thousand bales already had slipped in, and some of it was exported as American cotton to Spain, before WFA threw a block into the racket.

Capital Gains (and Losses)

OPA has distributed more than 95,000 copies of Chester Bowles' memorandum to industry advisory committees—the "Textbook"—in his campaign to familiarize industry with reconversion pricing policies and problems (BW—Oct. 7'44, p7). To get a copy write to Chester Bowles, Federal Office Building No. 1, Washington 25, D. C., and ask for "Our Pricing Objectives in the Reconversion Period."

Bureau of Internal Revenue has never issued a formal regulation, but distillers who desire to switch brand names from straight whisky to spirit blends are told to make a substantial change in the color or design of the label so that the possibility of consumer deception is minimized.

The Federal Trade Commission shortly will release a report discussing the effect of advertising on distribution costs.

OPA will move in, the end of the month, on midwest car owners who've been burning naphtha, a ration-free third-grade fuel, and put it on a ration basis. The order won't apply elsewhere.

—Business Week's Washington Bureau

THE COVER

Union Pacific chairman by vocation, diplomat by avocation, W. Averell Harriman, 52-year-old U. S. Ambassador to the Soviet Union, acts as a monitor for the White House at the current Moscow talks. Russian and British spheres of influence (BW—Oct. 14'44, p115) are problems high on the conference agenda, but the conversations may provide a pattern for the next conference of the Big Three—Roosevelt, Churchill, and Stalin.

DIFFICULTIES OF DOING BUSINESS AT A DISTANCE

500 MILES AWAY FROM THE DATA YOU NEED?



Perhaps that information is on a Marine Midland desk in Upstate New York

You can put away that timetable. You may not have to fight your way into a war-crowded train when you have a marketing problem in upstate New York.

Very likely officers of the Marine Midland Banks can supply just the information you need. These executives are located in 38 communities throughout New York State, and they're next-door neighbors to many bothersome sales and marketing problems.

Their firsthand knowledge of local people, local industry—and everything local—has helped executives reach important decisions on what to do in a particular territory. Before you travel, we suggest checking Marine Midland. Maybe then it won't be necessary.



The MARINE MIDLAND TRUST COMPANY of New York

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THE OUTLOOK

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Estimates you are hearing these days concerning the depth of V-E Day cutbacks are not to be relied upon (page 5).

The War Production Board is closest to the problem. Its top analysts warn against horseback guesses. **Each battle changes the outlook.**

Thus WPB was talking a 25% cutback in the year after Germany's fall late in 1943; this shifted to 30% early in 1944; at midsummer, assuming Germany's fall in October and Japan's a year later, it went to 40%.

Theoretically, 40% still stands, but the Nazis won't fall in October.

•

Long and short of the cutback story is this: The best figures in the world may be out of date before the ink is dry.

Take just this one thing. War production originally was scheduled to hit a top of more than \$5,800,000,000 in October. WPB based its 40% cutback estimate on the assumption that this would be attained.

Actually, Army and Navy haven't needed what they thought they would. We have had "anticipatory cutbacks," and October output will be about \$5,500,000,000. **Thus a 5% cutback is behind us.**

Therefore we should figure a 35% cut in war output rather than 40% after V-E Day, all other things being equal (which they aren't).

•

Predictions must depend on the timing of military successes and how much these successes cost. **When you are producing for two wars at once, there can be no single set of answers, obviously enough.**

Just for the sake of argument, suppose the German war drags and the Japanese campaign is pressed with all the present vigor.

One theory is that V-E Day would find output for the Pacific war as many months ahead of schedule as Germany's fall is behind. **That would mean deep cutbacks quickly (BW—Sep.30'44,p9).**

Yet the result could be quite the reverse. Suppose the German campaign proved extraordinarily costly. We might have used munitions the Army and Navy had counted on throwing at the Japs. The armed services would insist on having enough ships and planes and guns to meet the gloomiest Pacific outlook. **Cutbacks would be slow at first, speed up later.**

•

In planning for the transition from war to peace, remember this: Retail sales (page 85) probably will decline much less sharply than factory payrolls.

We have experienced declining employment in manufacturing for nearly a year. Yet people pocketed more cash (making due allowance for seasonal variations) in August than ever before in history (chart, page 18).

Higher farm income has been a supporting factor. The biggest thing, though, is the government's large war payroll, including money paid those in the armed services plus dependency allotments and discharge pay.

This has enabled consumers to spend substantially more than last year despite declining factory payrolls. And it will continue to act as a cushioning factor for months after we defeat Japan.

Prosperous retailing will make employment. The combination will help prevent wartime savings from going under the mattress.

•

Prospective home builders got the expected go-ahead from WPB (BW—Sep.30'44,p5) this week. You may build if you can find the materials. **Obviously that doesn't mean much, but it clears the atmosphere.**

Lumber will continue a problem for some time. Building hardware,

THE OUTLOOK (Continued)

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plumbing and heating equipment, however, will be in large-scale production before home building gets off to more than a limping start.

Some large housing projects, like those of the Metropolitan Life Insurance Co. (BW—Sep. 23 '44, p64), will be ready to go fast.

Incidentally, the early bird may catch a juicy worm. Construction workers will be looking for jobs. Makers of building material and supplies may have trouble finding enough customers for a few months. **The smart operator may be able to do pretty well in the matter of costs.**

Those who think rent ceilings will come off almost as soon as victory is won in Europe don't remember experience after the last war.

There were no rent ceilings last time, of course. But a special session of the legislature had to be called in New York, for example, in 1920 to slap on controls. And those controls did not come off completely for nearly six years.

If we succeed in maintaining a high degree of prosperity after this war, people are going to want better housing. There won't be enough to satisfy demand for years. The prediction of a million homes a year for ten years, rosy dream of the industry, might not prove too high.

Chemical companies are dropping hints as to their plans for handling an expanded volume of business after the war.

Du Pont lets it be known that new products to be launched when production can be started will bring employment to a higher level than the company ever experienced before the war.

Union Carbide & Carbon has set up a new "plastics group" which brings all its plastic products under a single management instead of splitting them among five groups as at present. Bakelite Corp., a wholly owned subsidiary, will handle sales of the new plastics group.

Another battle over use of government plants in competition with private industry is developing—this one in the fertilizer field.

The Dept. of Agriculture wants about 40% of the government's \$250,000,000 investment in synthetic ammonia plants converted to nitrogen fertilizers. This would mean production of some 300,000 tons of fixed nitrogen annually.

Chemical experts attack the plan from several aspects. They say: (1) Consideration should be given to some standby capacity; (2) the government should avoid flooding the market; (3) there is the good neighbor policy to remember in relation to Chile's sodium nitrate; (4) ammonia capacity can be converted to methanol which will be much needed in plastics.

The industry frankly fears the issue will become a political football.

Something new in automobile selling has reached the active rumor stage.

The way filling stations have blossomed out as auto-parts salesrooms is an old story. Well, why not make them full-fledged car dealers?

These stories concern Standard Oil of Ohio (with some 3,800 dealers, all but about 350 of them independents) and Willys-Overland. Willys officials say they have heard the rumors but there is nothing to them; Sohio people say simply, "No comment."

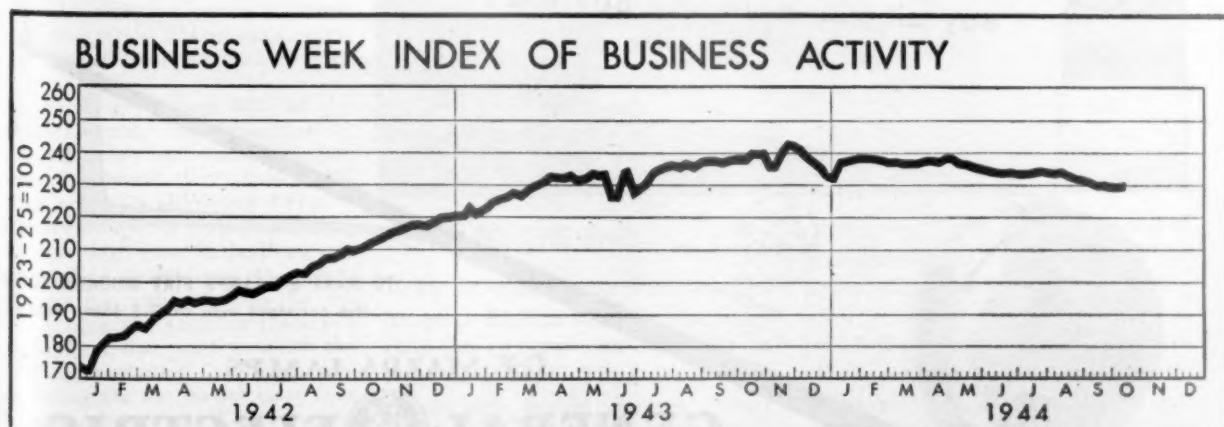
Best bet: There have been conversations but no decisions.

FIGURES OF THE WEEK

	\$ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
THE INDEX (see chart below).	*230.8	†230.3	230.8	238.4	240.7
PRODUCTION					
Steel Ingot Operations (% of capacity).....	97.0	96.9	95.3	99.5	100.7
Production of Automobiles and Trucks.....	19,435	16,865	20,865	17,330	19,535
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$5,907	\$5,595	\$6,407	\$6,155	\$8,838
Electric Power Output (million kilowatt-hours).....	4,355	4,375	4,395	4,307	4,382
Crude Oil (daily average, 1,000 bbl.).....	4,727	4,692	4,746	4,432	4,412
Bituminous Coal (daily average, 1,000 tons).....	1,937	†2,013	2,019	2,003	2,014
TRADE					
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	85	88	86	81	84
All Other Carloadings (daily average, 1,000 cars).....	61	64	63	51	67
Money in Circulation (Wednesday series, millions).....	\$24,099	\$23,881	\$23,495	\$21,295	\$18,978
Department Store Sales (change from same week of preceding year).....	+16%	+12%	+14%	+23%	+9%
Business Failures (Dun & Bradstreet, number).....	15	27	23	33	36
PRICES (Average for the week)					
Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	249.0	250.0	248.9	249.8	248.1
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	166.2	166.0	165.7	163.0	160.4
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	225.4	225.5	222.5	222.4	217.6
†Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
†Scrap Steel Composite (Iron Age, ton).....	\$15.75	\$16.08	\$17.625	\$19.17	\$19.17
†Copper (electrolytic, Connecticut Valley, lb.).....	12.000¢	12.000¢	12.000¢	12.000¢	12.000¢
†Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.60	\$1.62	\$1.51	\$1.64	\$1.53
†Sugar (raw, delivered New York, lb.).....	3.74¢	3.74¢	3.74¢	3.74¢	3.74¢
Cotton (middling, ten designated markets, lb.).....	21.64¢	21.71¢	21.30¢	21.01¢	20.31¢
†Wool Tops (New York, lb.).....	\$1.340	\$1.340	\$1.337	\$1.315	\$1.353
†Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢
FINANCE					
90 Stocks, Price Index (Standard & Poor's Corp.).....	103.3	102.9	99.5	94.3	94.2
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	3.54%	3.55%	3.56%	3.68%	3.81%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.72%	2.72%	2.71%	2.74%	2.69%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	1%	1%	1%	1-1%	1-1%
BANKING (Millions of dollars)					
Demand Deposits Adjusted, reporting member banks.....	35,890	35,383	35,895	33,766	30,742
Total Loans and Investments, reporting member banks.....	54,087	54,436	55,041	51,596	51,648
Commercial and Agricultural Loans, reporting member banks.....	6,110	6,091	6,016	6,188	6,307
Securities Loans, reporting member banks.....	2,482	2,480	2,534	2,089	3,066
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks..	40,130	40,506	41,113	38,089	36,698
Other Securities Held, reporting member banks.....	2,910	2,931	2,962	2,887	2,941
Excess Reserves, all member banks (Wednesday series).....	1,000	900	971	986	1,608
Total Federal Reserve Credit Outstanding (Wednesday series).....	17,503	17,099	16,916	13,106	9,362

* Preliminary, week ended October 14th.
 † Ceiling fixed by government.

† Revised.
 § Date for "Latest Week" on each series on request.



GOOD LAMPS ARE THE HEART OF ANY GOOD LIGHTING INSTALLATION

1938—Factories, stores and offices everywhere begin to use light's latest wonder—Fluorescent lighting—pioneered by General Electric research in 1935.

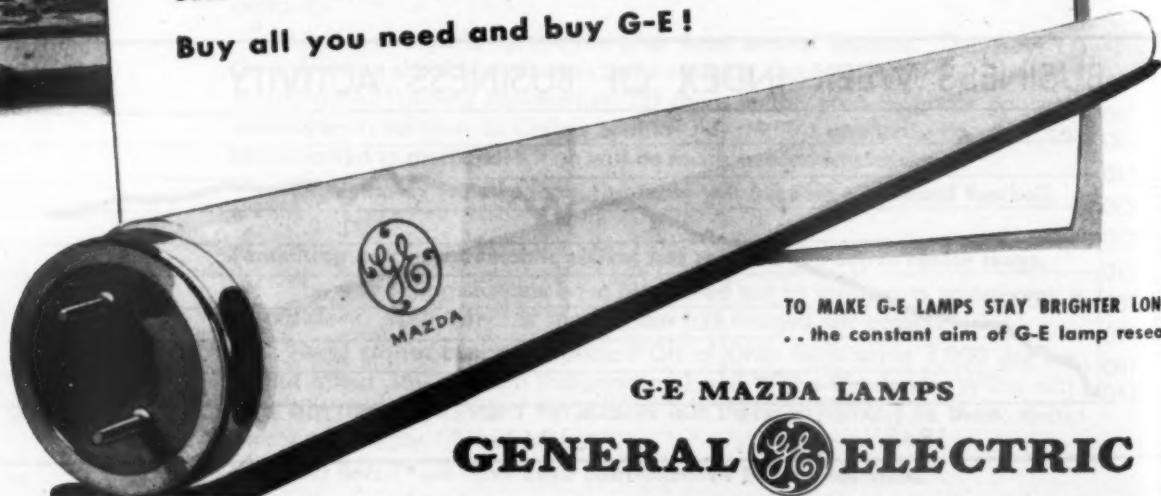
1939—Hitler marches into Poland.

1941—War. President calls for production miracles.

1942—America rolls up its sleeves. G-E Mazda Fluorescent lamps "roll back the roofs" of plants everywhere for speedy, safe, round-the-clock production.

1943—War industry takes nearly entire G-E Fluorescent output.

1944—General Electric Mazda Fluorescent lamps again freely available! All you need for replacements in stores, offices and homes! You get about eight times more lamp value than in 1938 . . . since they cost 60% less, last 2½ times longer and give 35% more light! Buy all you need and buy G-E!



TO MAKE G-E LAMPS STAY BRIGHTER LONGER
.. the constant aim of G-E lamp research

G-E MAZDA LAMPS

GENERAL ELECTRIC

Hear the General Electric radio programs: "The G-E All-Girl Orchestra", Sunday 10 p. m. EWT, NBC; "The World Today" news, every weekday 8:45 p. m. EWT, CBS. • BUY WAR BONDS

Antitrust Ax Resharpener

Broad program drafted by Berge for the renewal of trust-busting campaign after the war. Antitrust Division to keep a watchful eye on basic industries built up since Pearl Harbor.

In laying their postwar plans, business-war planning of at least one government agency—the Antitrust Division of the Justice Dept.

Wartime Armistice—By and large, the war years have been lean years for the government's antitrust men. The Antitrust Division hit its stride in 1941, when a staff of some 275 lawyers and economists was going full-tilt under the direction of the ebullient Thurman Arnold. Since then, the war has whittled the division's professional staff down to 170 and has sharply restricted the scope of its activities.

At the request of the War and Navy departments, the division has postponed trial of 25 cases until they can be prosecuted without the risk of hampering the war effort (box, page 16). The division yielded reluctantly to the military's argument that important war contractors should not have to take time out for antitrust litigation.

Joint Action Tolerated—During the war, the Justice Dept. has sanctioned many programs for cooperative action by industry—allocation of production, division of markets, price-fixing—which would normally be suspect to the guardians of the antitrust laws. The industry advisory committees set up by WPB, OPA, and other war agencies likewise have operated with the knowledge and consent of the department. But the Antitrust Division has merely tolerated all such joint action schemes as a necessity of war; it hasn't learned to love them.

Wendell Berge, present head of the Antitrust Division, may lack some of Thurman Arnold's histrionic ability, but he shares his former chief's convictions on trade restraints (BW—Sep. 4'43, p. 7), and he has brought to his job additional convictions of his own. If the Roosevelt Administration is returned to power, Berge and his assistants may be expected to bend the Antitrust Division's efforts to insure that practices which the government permitted, and even fostered, during the war do not carry over into peace.

New Industries Scanned—The trust busters won't stop with merely mop-

ping up after the war agencies. They are drafting a broad program, designed to foster untrammelled competition in virtually every field of trade and industry, and they are paying particular attention to the new basic industries such as light metals, plastics, and electronics, which have grown up during the course of the war.

The Antitrust Division wants to be sure that the vastly expanded capacity and new technology in these fields are as fully available in peace as they have been during the war. Any efforts to restrict production, stabilize prices, divvy up markets, or withhold from business and consumers the benefits of wartime technology will bring down the antitrust ax as soon as the wartime re-

straint against prosecutions has been lifted.

Eye on Construction—Construction is another industry which the division has earmarked for particular attention.

The trust busters, like other government officials, believe that construction may be the key to successful reconversion and postwar prosperity (BW—Sep. 30'44, p. 5). They will keep a weather eye out for restrictive practices which might bolster prices, depress volume, and get the industry off to a slow start.

No Truce on Cartels—Berge's men are already familiar with the monopoly devices for which they are gunning. No. 1 on the division's list right now is the international cartel, which can embrace almost all the practices which are anathema to the trust busters—restriction of production, division of markets, price-fixing, restrictive patent agreements.

The Justice Dept. isn't holding its fire on cartels until the government develops its projected policy on private international agreements (BW—Sep. 23 '44, p. 15). Since 1937, the Antitrust



TOWARD THE END

With its warbirds perched on deck for quick flight, a carrier of the Essex class cuts a course with other craft in Admiral Halsey's Third Fleet for a point well within Japan's "inner defense zone"—the Philippines. Stepped-up bombings of Philippine

strong points, plus the neutralizing of Formosa—during which the Nipponese fleet made a hurried exit—made the plan of action apparent. Invasion of the Philippines—to provide a stepping stone to the Asiatic mainland—was obviously imminent. After that Japan itself will feel the full fury of combined Pacific forces.

Some Antitrust Suits Postponed

Under the heading of "unfinished business" the Antitrust Division has filed away some 25 cases which have been shelved for the duration because the War and Navy departments felt that litigation would take valuable time of business executives engaged in the war effort. Collectively, the allegations made in these cases run the gamut of antitrust violations from participation in international cartel agreements to assorted trade restraints in the domestic market.

A few cases on which the War and Navy departments had requested only temporary postponements—or in which defendants entered pleas of nolo contendere—have been closed recently. These involved E. I. du Pont de Nemours (explosives), Associated Plumbing & Heating Merchants, Halibut Liver Oil Producers, and Tannin Corp. Some fines were collected in all cases, although indictments were dismissed against various individual defendants.

The Justice Dept. considered four cases sufficiently important to seek, and get, presidential permission to prosecute them over the objections of the military. The first of these cases against the National Lead Co., which is charged with participation in an international titanium cartel, will be brought to trial Dec. 4. The other antitrust cases, which are scheduled to follow, are: U. S. vs. E. I. du Pont de Nemours & Co. (plastics); U. S. vs. Rohm & Haas Co., Inc. (plastics); U. S. vs. Bendix Avia-

tion Corp. (aviation instruments).

Cases pending at the request of the armed forces are:

Allied Chemical & Dye Corp. (dye-stuffs)

American Air Filter Co. (air filters)

American Brass Co. (flexible metal hose and tubing)

American Optical Co. (Bausch & Lomb Optical Co.) (optical goods)

American Surgical Trade Assn. (surgical supplies)

Auditorium Conditioning Corp. (air-conditioning units)

Bausch & Lomb Optical Co. (optical goods)

Bemis Bros. Bag (open mesh bags)

Central Supply Assn. (plumbing supplies)

E. I. du Pont de Nemours & Co. (chromic acid)

E. I. du Pont de Nemours & Co. (muriatic acid)

Elgin National Watch Co. (watches)

General Chemical Co. (laboratory chemicals)

General Electric Co., Fried. Krupp (tungsten carbide)

General Electric Co. (fluorescent lamps)

General Electric Co. (incandescent lamps)

Hamilton Watch Co. (watches)

Monsanto Chemical Co. (sulphuric acid)

Mutual Chemical Co. of America (bichromates acid)

Optical Wholesalers National Assn. (optical goods)

Smoot Sand & Gravel (sand and gravel)

Southern California Gas Co. (gas ranges)

Victor Chemical Works (oxalic acid)

Waltham Watch Co. (watches)

Division has brought 26 major actions which seek to break up alleged cartels in such varied fields as aircraft accessories, light metals, chemicals, dyestuffs, fertilizer, fluorescent and incandescent lamps, magnesite brick, matches, military optical instruments, molybdenum, pharmaceuticals, photographic materials, plastics, quebracho, titanium, and tungsten carbide. Many more cartel cases, in all stages of development, are in the division's files.

• **Patent Pools Watched**—The antitrust crusade on restrictive patent agreements, which has its roots in the investigations of the Temporary National Economic Committee (BW-Mar.29 '41,p25), will continue full-tilt alongside the new drive against cartels. (Since patents are often the nucleus of cartel agreements, the trust busters sometimes may be able to bring down two birds with one stone.)

Patent busting will pick up momen-

tum as reconversion rolls along. The Justice Dept. regards a free patent structure as fundamental for a competitive postwar economy. The government is actively encouraging small business and new enterprises to snap up enemy patents seized during the war. The Antitrust Division means to see to it that the big advances made in domestic technology during the war do not result in an upsurge of monopolistic patent pools a few years hence.

• **Court Ruling Expected**—The chief legal support for most present-day patent practices rests in the Supreme Court's decision in 1926, upholding the validity of the patent-licensing agreement under which General Electric Co. licensed Westinghouse to manufacture electric lamps.

Since the Antitrust Division's patent-busting activities got under way, a long series of court decisions, beginning with the Supreme Court ruling which

outlawed the jobber-licensing system used by Ethyl Gasoline Corp. (BW-Mar.30'40,p17), has whittled down the stature of the General Electric case.

The division hopes to get more ammunition to use against patents which the Supreme Court rules, sometimes during the current session, on the government's antitrust case against Hartford Empire Co., Hazel-Atlas Glass Co., and other companies which are charged with maintaining a patent monopoly in the glass container field (BW-Sep.30'41,p22).

• **More Power Sought**—Whenever the courts permit it, the Justice Dept. intends to intervene in private patent litigation if it looks as though the patent sued upon has served monopolistic ends or been otherwise misused.

The department is seeking legislation from Congress which would sanction such intervention without the need for court approval. The trust busters argue that many new enterprises have been throttled in infancy merely by the threat of costly patent suits.

• **Pullman Case Pattern**—Wholly integrated operations which have resulted in (or which threaten to result in) monopolistic control of an entire field of enterprise will be another target of antitrust prosecution. In such cases the division can be expected to demand that companies divest themselves of one or more functions.

The antitrust suit against Pullman Inc., which resulted in the company's being forced to choose between its car manufacturing and sleeping car business (BW-Jul.29'44,p49), has set the pattern for similar divestiture cases.

• **Public Backing Sought**—Berge hasn't forgotten Thurman Arnold's maxim that the antitrust laws depend for their effective enforcement on public support. Hence, Berge is already drumming up public favor for the Antitrust Division's postwar program. Last month he stumped the West Coast. In a series of five formal speeches—and many informal conversations—he warned of the dangers of monopoly control by "eastern financial interests," which might seek to keep western enterprise from realizing its postwar potential.

• **Mandate Hailed**—Berge is telling new enterprises and small businesses that the Antitrust Division is their particular friend. Relations between the division and the government's Smaller War Plants Corp. are cordial.

The demobilization and surplus property disposal bills (BW-Sep.23'44,p7) give the Justice Dept. exactly what it wanted—a mandate to go forth and see that reconversion is carried out in the fullest interest of free, competitive enterprise. The Justice Dept. is to review

advance the sale of industrial facilities worth more than \$1,000,000 (BW—3,30'44,p17). Acceptance of the department's recommendations is not compulsory, but any company which is to receive its clearance knows that it may be buying a lawsuit along with surplus property.

String on Plants—The department may try to see that new enterprises, other than vested interests, take over new wartime plants and facilities in such fields as light metals, chemicals, synthetic rubber, aviation gas, aircraft, radio and electrical equipment.

The Antitrust Division's patent activities will be furthered by the fact that the Justice Dept. will have an opportunity to review surplus sales of patents, processes, techniques, or inventions, irrespective of their cost.

No Postwar Truce—The Justice Dept. has resisted the demands of some business interests that present antitrust sanc-

tions for joint action plans and industry advisory committees be continued indefinitely—and even extended—in the reconversion period. These demands were the subject of an exchange of letters between Attorney General Francis Biddle and WPB last summer.

Biddle said that the Justice Dept. would continue to sanction industry advisory committees, "while hostilities continue" if they do not step over the line and exceed their strictly advisory functions. Biddle also agreed to continue to sanction joint action plans, unless they are used to accomplish "unlawful private ends."

• **Planners Protest**—Trade associations and other industry groups are arguing that the department's attitude makes it impossible for them to cooperate fully in reconversion planning.

If adequate cooperation isn't forthcoming, the Justice Dept. may be forced into some modification of its present policy. But as far as the trust busters are concerned, the temptation to monopoly is as strong as Eve's apple, and they think the government will be laying up trouble if it lets industry take the first bite.

Day of Reckoning

Disposal of Northwest's aluminum plants stirs rivalries. Columbia Metals is interested in Alcoa's Troutdale operation.

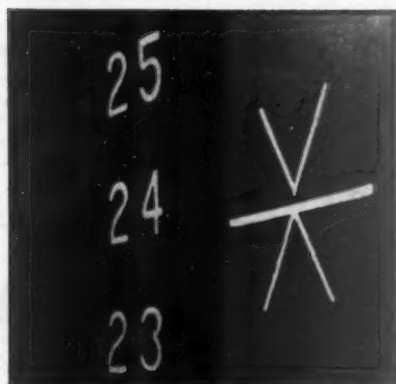
What's going to happen to the big, new aluminum industry built to supply war needs in the Pacific Northwest when those needs no longer have to be met?

Few questions have generated such a welter of rumor, out of which last week emerged one fairly solid certainty: that the Columbia Metals Corp., formed more than a year ago by 20 northwest capitalists, is trying to get the plant at Troutdale, Ore., which the Aluminum Co. of America now operates for the Defense Plant Corp.

• **Plants Listed**—The northwest aluminum plants for which the day of reckoning is now fast approaching include:

Operated by	Owned by	Annual Capacity (Pounds)
Aluminum Co. of America, Vancouver, Wash.	Alcoa	172,000,000
Aluminum Co. of America, Troutdale, Ore.	DPC	141,000,000
Aluminum Co. of America, Spokane, Wash.	DPC	216,000,000
Olin Corp., Tacoma, Wash.	DPC	41,000,000
Reynolds Metal Corp., Longview, Wash. (RFC-financed)	Reynolds	62,000,000

• **Depends on Demand**—Basic questions that will affect the destiny of all five plants are: (1) How much demand will



NOT FOR DECORATION

Emphasized Plimsoll lines on bows of the Navy's new attack transports serve an important purpose. Engraved at the proper load mark, they serve as a caution against loading the vessel beyond its fighting weight. This is important because this craft must be able to keep apace the task force with which it's designed to operate.

there be for all the 2,000,000,000 lb. of aluminum that America can now produce in a given year and (2) how much can the western industry deliver at a price competitive with that of other plants, particularly in the Tennessee Valley.

Because it's likely that Reynolds and Olin will at least make a stab at trying to capture a piece of the market for their Pacific plants, both companies probably plan, if they can manage it financially, to take over the plants from DPC when their war utility is ended (page 24). For similar reasons, Alcoa naturally figures on keeping its owned and operated plant at Vancouver.

Hence, speculation has focused principally on the disposition of the two plants at Troutdale and Spokane which Alcoa operates for DPC. It's no private secret that Alcoa, a target of antitrust action, is persona non grata to the present Administration, particularly to Wendell Berge, head of the Antitrust Division of the Dept. of Justice, who will have a veto over the disposition of DPC plants, if the present Administration is continued in power (page 15).

The Antitrust Division can be expected to favor acquisition of the Troutdale plant by Columbia Metals. In his recent swing around the West Coast, Berge exhorted western businessmen to wrest control of local enterprises from "eastern financial interests."

• **On the Block Soon?**—That's why there's such interest in the fact that

JOINT ACTION O.K.'D

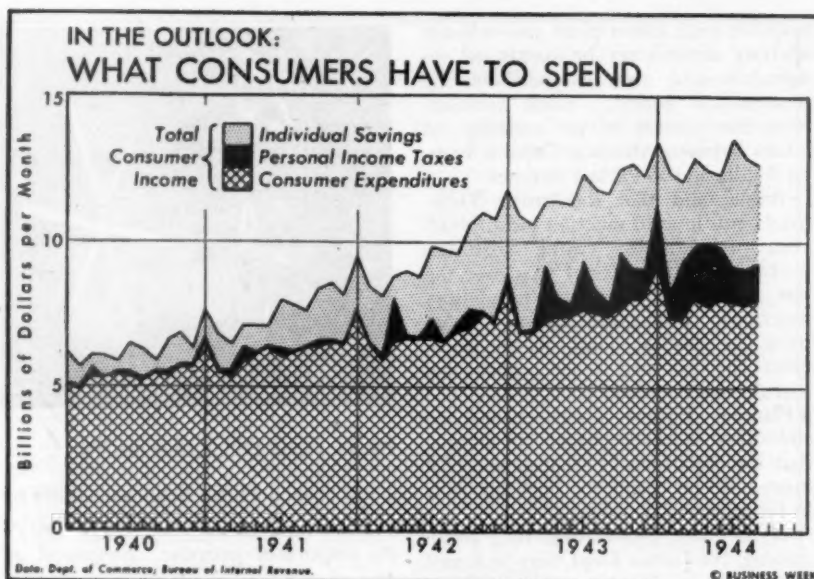
Operations of industry advisory committees to the various war agencies have received Antitrust Division sanction through an informal exchange of letters between the Attorney General and the agencies concerned.

This sanction dates back to the earliest days of the war effort when the then Attorney General Robert H. Jackson and the then Price Administrator Leon Henderson agreed that industry action to maintain price ceilings would not be considered an antitrust violation (BW—Feb. 8'41,p7). It has since been renewed and supplemented. Similar informal sanctions have been applied to joint action plans of a general character.

More specific joint action plans, which have required formal agreements among private companies, are provided for in Public Law 603 (the Smaller War Plants Corp. Act).

Under the act, the chairman of WPB must consult with the Attorney General before certifying a plan as essential to the prosecution of the war. Such certificates are formally reported to Congress by the Attorney General. The War Food Administrator and the Secretary of Agriculture also have authority to issue certificates.

Through Aug. 25—last date of reporting—210 certificates had been issued, and 181 of these were still operative.



The people of the United States pocketed a billion dollars more in August, 1944, than in the same month last year. And, even though the cash total was under the peak of late 1943, the August figure was an all-time high on a seasonally adjusted basis (despite a steady decline in manufacturing employment since late last year). Per-

sonal savings in the first eight months of 1944—just over \$26,000,000,000—about duplicated the like 1943 period, but taxes this year were much higher. The big tax bill, in addition to stabilizing saving, has also resulted in a less spectacular rate of climb in the amount of consumer expenditures for goods and services.

Columbia Metals Corp. is casting its eyes at the Alcoa Troutdale plant, reputedly one of the most efficient in the country. That plant may be on the block before too long, because two of its four potlines were closed down in the recent aluminum cutback (BW—Sep. 9 '44, p38). Alcoa's present lease arrangements with DPC are dependent on maintenance of specified output rates.

Columbia Metals, which has spent a reported \$50,000 in surveying the industrial demands for aluminum, will also operate the \$4,000,000 DPC plant to produce alumina from clay when that plant is completed at Salem, Ore., next spring (BW—Jul. 24 '43, p59).

• **Interest Acknowledged**—James Oliver Gallagher, former president of the Pacific Fruit & Produce Co. and president of Columbia Metals Corp., last week was shuttling between New York City and Washington, D. C., reportedly in the interests of the deal.

Charles F. Clise, president of the Seattle Chamber of Commerce and chairman of the board of Columbia Metals, admitted in Seattle that his firm is interested in Troutdale, although it "has not actually made or received an offer on the Troutdale plant."

In Washington, D. C., and Seattle there were unconfirmed reports that Eric

Johnston, president of the United States Chamber of Commerce and a Seattle businessman, is among the backers of Columbia Metals Corp. and is actively interested in its possible acquisition of the Troutdale plant.

• **Kaiser Mentioned**—Meanwhile, reports persist that Henry Kaiser, already established in the magnesium business, is also interested in the next lightest metal—aluminum—to build the planes and cars which it seems increasingly certain he intends to produce in the postwar period.

Conceivably before the fate of the aluminum plants in the Northwest is finally settled, Columbia Metals may find itself bidding for or against Kaiser for some of the operations.

• **Link With Fishers?**—Additional speculation revolves around the moves of the four Fisher brothers, who recently resigned from General Motors Corp., filed incorporation papers of their own in Delaware and registered to do business in Michigan and—significantly, some say—in Oregon (BW—Oct. 7 '44, p19). That maneuver led naturally to a linking of their names with Kaiser and with his aspirations to fashion a plane-train-auto manufacturing business out of the war-born steel and light metals industries on the Pacific Coast.

Really New Cars

Sufficient changes to what sales appeal are now expected. New models likely will follow designs planned for 1943 line.

When it became evident that resumption of auto production was a war-time possibility, everybody thought that new cars would be the same old cars—dead-ringers for the 1942 models. Now the story has changed. Changes in design won't be drastic, but they will have appeal. When production does start the first cars off the assembly line probably will look like what 1943 models would have looked like had not war interfered.

• **Time for Planning**—This likelihood is made possible by several factors. Washington's permission to design experimental models and to order machine tools; the increased amount of time available for planning and development work.

When slower progress of the war in Europe held up permission to recommence passenger car output, it became evident in Detroit that there was no reason for freezing models to 1942.

• **Good Sales Insurance**—This elbow room to improve the products is gratifying to auto makers on at least two counts. They all want something a little different to set their own vehicles ahead of the others competitively.

And, for merchandising purposes they feel that modestly changed cars will be good insurance against possible reactions of potential buyers conditioned to expect dream cars after the war.

This possible adverse reaction kindles fear that a buyers' strike would eventually, particularly because the public might believe that immediate postwar models were only transition pieces to be followed soon by "super" models. Manufacturers feel that automobiles obviously different from their predecessors will be reassuring.

• **Changes in Design**—The changes ahead, like many others of the past, will look more important than they are. Different front ends, with revised grille patterns, will go a long way toward making entire designs look greatly changed. This may prove more of a necessity than a desire, because zinc die casting plants, producers of the glittering front end embellishments of the past, may be slow to return to normal production. Some companies may go back to the painted stampings used on 1942 models, but these designs found little favor compared with bright grille work. Stainless

steel and other substitutes may be tried so.

Fender lines may be modified on immediate postwar cars. New dashboards and new arrangements of hardware, traditional variants in every new car since the twenties, will be introduced. New upholstery also will probably be seen.

New Dies Needed—The great share of such changes require new dies but not new tools, so they will not infringe to any significant extent on war work. In fact, it will probably be possible to produce the larger share of such dies while plants are being reconverted.

Although car shells will be thus modified, working mechanisms will not. A few changes in engine accessories might turn up, but these will be insignificant. Major changes will wait till later.

On the Boards—In large measure, many of the forthcoming modifications will be taken bodily from the drawings laid aside when war began. Usually by late winter the auto men had a good idea of what their models of the following autumn were going to look like, and the winter of 1941-42, when we entered the war, was no exception.

Comparatively little preparatory work will be necessary, therefore, to put the first postwar cars a step or two ahead of their predecessors.

Graham Kicks Off

Plans for marketing first postwar model passenger car ahead of competitors are revealed by Frazer.

Automobile manufacturers are cudgeling their brains to figure out design changes that will lift their new cars out of the 1942 classification, but Graham-Paige Motors Corp. intends to be the first company on the market with a real postwar model passenger car. This despite widespread skepticism in Detroit circles.

• Farm Implements Also—According to Joseph W. Frazer, who told the press about the company's plans at a meeting in New York this week, Graham-Paige has the money, the plant, and the ideas. He's convinced, too, that the concern will be able to sign up the dealers so necessary to success—one of the points on which the other motor car people have been frankly dubious.

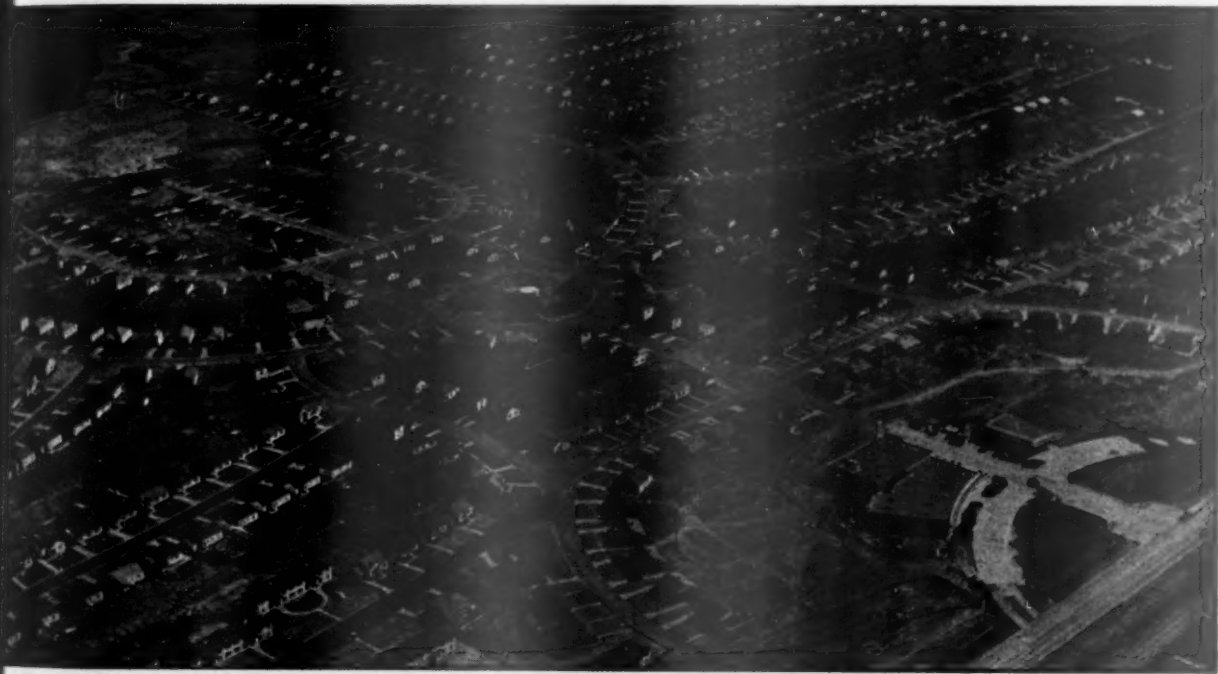
Finally, Frazer feels that Graham-Paige will have a valuable trump card in the form of a farm implement business, although this field admittedly is

just about as tricky a market to master as it is for passenger cars.

• Ready in 1946—If the established companies have an inside track on getting tooled up (Graham dropped out of the passenger car field months before Pearl Harbor), Frazer is convinced that his company will at least have the advantage of a minimum tooling job. Plans call for but one type of engine, one chassis. There will be one or maybe two body designs. The car is to enter the popular-price field—under \$1,000 if the dollar buys as much labor and materials as it did in 1940. He doesn't expect to be able to show a car to the public until 1946, but he confidently predicts that the public demand for new cars will not even have been dented by that time. Once supply has caught up with demand, he figures Graham-Paige will have cemented its dealer lines if the car comes up to the new management's hopes.

Frazer figures that Graham-Paige has plant capacity, without expansion, to turn out 100,000 cars a year (although he doesn't offer that figure as a prediction on actual production) against top output before the war of 21,318 cars in 1937.

• Tractor in 1944—On the farm implement side, the company expects to



PRIVATE WAR HOUSING

One of the few big war housing centers built with private capital, Midwest City, Okla., is banking on its peacetime future. Founded and built by W. P. Atkinson of Oklahoma City,

this neat symmetrical town (pop. 7,000) was established 2½ years ago to house employees of the Army Air Service Command and Douglas Aircraft plant. Churches, schools, and recreational and shopping facilities have been added to make the com-

munity completely self-sufficient. Counting on the postwar use of the nearby air depot and plane factory (investment \$80,000,000), Midwest City feels certain that it will become no ghost town—although situated only nine miles from Oklahoma City.

show a new tractor this year. It will get into production as soon as WPB smiles on the project. There will be other implements—to be announced later—and the company may form tie-ups with concerns manufacturing farm machinery that will fit into the line. Graham-Paige does not propose, however, to manufacture a full line of farm equipment.

A sidelight on the postwar planning of the company is that the management can see no reason why its passenger cars and farm implements cannot be handled by the same dealers in agricultural areas.

Utility Challenge

Supreme Court finally may rule on constitutionality of the holding company law's famous "death sentence" clause.

Constitutionality of one of the landmarks of New Deal legislation—the "death sentence" clause of the Public Utility Holding Company Act of 1935—finally comes before the Supreme Court this term with every likelihood of a decision.

• **Dual Challenge**—Both sections of the "death sentence's" double-barreled grant of power, known ominously to the electric industry as Sec. 11 (B) (1) and Sec. 11 (B) (2), have been challenged in the courts.

The high court has agreed to review a District of Columbia appeals court decision which holds constitutional a Securities & Exchange Commission order directing Engineers Public Service Co. to divest itself of \$30,000,000 worth of utility properties under Sec. 11 (B) (1), the section that allows SEC to require a holding company to confine its operations to a single geographically integrated system.

• **Two Other Cases**—Challenging the other provision of the "death sentence," that which allows SEC to remove unnecessary complications in holding company financial structures, are the American Power & Light Co. and Electric Power & Light Co., each a subholding company of Electric Bond & Share, and each under a SEC dissolution order based on Section 11 (B) (2).

The high court had not granted certiorari in these two cases, which came to it on appeal from the first circuit this week, but SEC notified the court that it was not opposed to granting of the requested review.

Determination of constitutionality of the "death sentence" has been before the court for at least two years, but has

been thwarted by inability to obtain a quorum, for four justices disqualified themselves in the North American Co. test case (BW—Jun.10'44,p7). The North American Co. was ordered by SEC to divest itself of \$190,000,000 worth of properties.

• **Guessing the Count**—No announcement has ever been made as to those who declined to serve, but speculation by court attaches lists Chief Justice Harlan F. Stone and Associate Justices Frank Murphy, Robert H. Jackson, William O. Douglas, and Hugo Black. Murphy and Jackson were involved in the North American case, when they served as Attorney General and Douglas probably was involved in it when he was chairman of SEC. Black is an obvious guess because of his Senate leadership for passage of the holding company law. No particular reason is offered as to why Chief Justice Stone would have disqualified himself—if it is true that he did.

Legislation to permit the North American case to be referred by the Supreme Court to a special three-judge circuit court was sidetracked last summer because congressmen felt that the issue had been settled by default when the company presented a proposed divestment plan to SEC.

• **No Sign of Misfire**—Conceivably, either or both the Engineers Public Service and the American Power & Light cases could misfire as did the North American case, but there has been no indication thus far of any reason for widespread disqualifications in these cases.

Shipping Enigma

Exact size of the postwar fleet is an academic question, but it's certain that there will be demand for new ships.

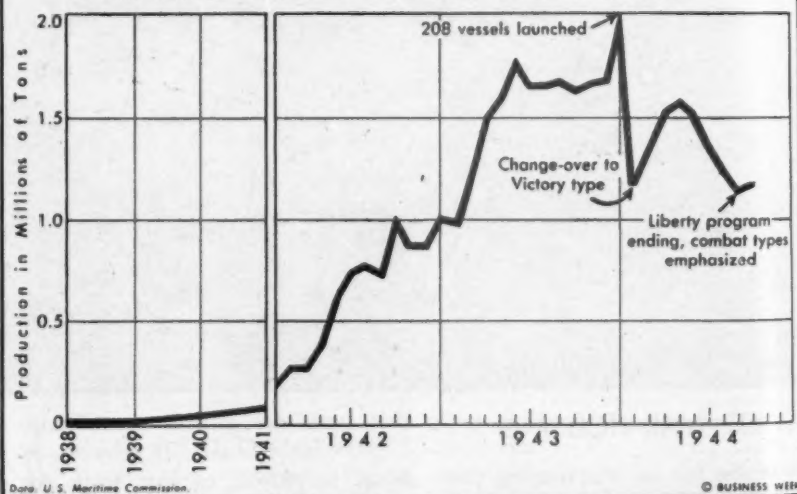
By the middle of next year, the United States will have a merchant fleet of 57,000,000 deadweight tons. This will be nearly five times the tonnage placed under War Shipping Administration control in the spring of 1942, a few months after Pearl Harbor. It will be nearly three times as large as the British merchant fleet in the years before the war, and will constitute an estimated 70% of the world's merchant tonnage.

• **Big Demand Foreseen**—This project is generally assumed to portend a postwar shipping glut—although it is possible to demonstrate that under favorable economic circumstances there will be a shortage of shipping after the war (BW—Feb.12'44,p15).

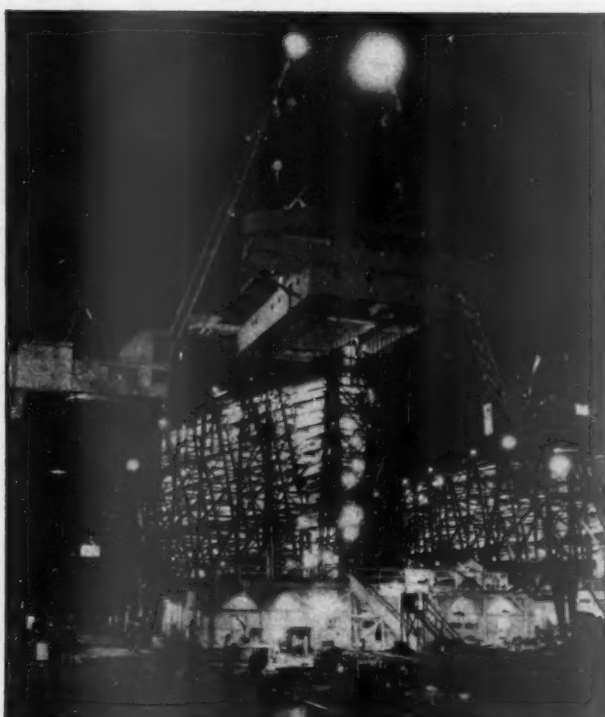
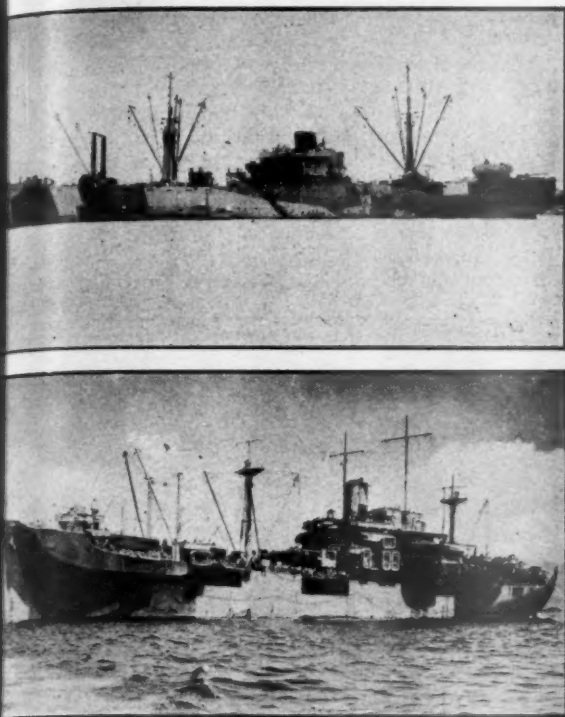
Regardless of whether the supply does or doesn't exceed demand, the end of the war will witness a great demand for new ship construction. It will also witness continued efforts to guarantee that a significant part of the U. S. war-built tonnage be scrapped or immobilized. In brief, the chief problem will be to make a gigantic war-built fleet into a streamlined instrument adapted to American trade needs.

• **Trend Is Reversed**—The compulsion to build more and more ships in the

SHIPBUILDING—PAST ITS PEAK



Since American shipyards turned to building faster cargo and military-type vessels, monthly tonnage production has fallen from 1943 levels, which hit a peak in December when 208 vessels (2,000,000 tons) were launched.



the Oregon Shipbuilding Corp. in Portland, a giant superstructure segment is lowered into place, a night scene typical in all yards building the Navy's hottest priority items—attack transport and cargo craft for the big

Pacific drive. Fitted with personnel landing craft and tank lighters, the transports (APAs) are being adapted from the Maritime Commission's C-3 and Victory type hulls, with a small number being built according to a

special design of the Navy and USMC. Their teammates (AKAs) are combat loaders that are adaptations of the commission's C-2 freight vessels, and carry all equipment necessary to maintain troops in beachhead operations.

shortest possible time, involving simplification and mass production, has greatly altered the composition of the American merchant marine. In conjunction with the use of fast, special-type cargo vessels, the trend has been toward a large fleet of relatively slow, general-purpose ships. That trend is now being reversed.

Since the start of the Liberty ship program, 2,500 of these 10,800-ton seven-knot vessels have been ordered by the U. S. Maritime Commission. To date, about 2,330 Liberties have been delivered; 45 are in the ways; and 125 have not yet had their keels laid. This program involved construction of 27,000,000 deadweight tons.

Faster Ships Ordered—The switch to faster (17-knot) Victory-type ships came only when propulsion equipment could be squeezed into tight war production schedules (BW—Aug. 28 '43, p18). The first of 539 Victories was ordered in April, 1943, and delivered at Henry Kaiser's Oregon Shipbuilding Corp. yard last February.

So far the Maritime Commission has taken delivery of 85 Victory ships. These, unlike the unwieldy Liberty, are easily adaptable to the requirements of peacetime commerce.

• **Merit Is Recognized**—The military was not long in recognizing the merits of the Victory ship, and its potential usefulness in the Pacific war. Consequently, the Maritime Commission is turning out military versions of the Victory, as well as other big combat vessels based on its merchant-ship designs. Deliveries of Victories adapted to military specifications—stronger framed, armored, refrigerated, and heavily armed—now outnumber deliveries for wartime trade about three to one.

The assault ships built by the commission are known variously as combat loader cargo ships, or AKAs, and combat loader transport ships, or APAs. According to Secretary of the Navy James V. Forrestal, these are the "most urgent items on the production program." The Navy has asked for delivery of a pair a day—double the production in September when the assault ship program had not yet hit its stride.

• **Self-Contained Units**—The assault ship would have a cargo capacity of 9,500 tons except for its heavy armor and guns. As delivered, the tonnage is around 4,500. The cargo and transport pairs are designed to carry complete combat forces into land battle from

great over-water distances, and are described officially as self-contained fighting units.

While this shift to faster vessels in the 10,000-ton class has been in progress, another equally significant trend has been started. The Maritime Commission has ordered 120 coastal cargo vessels of 4,500 tons which are now coming off the ways at the rate of half a dozen a month.

Thus the first steps are being taken to correct the imbalance necessitated by concentration on the simple, quickly built Liberty ship.

• **Land's Proposal**—Meanwhile, arguments continue over the optimum size of America's postwar merchant fleet. Vice Admiral Emory S. Land, chairman of the Maritime Commission, has consistently plumped for a fleet of 15,000,000 to 20,000,000 deadweight tons. Taking a figure about midway between these two, he has proposed this pattern of utilization: 3,500,000 tons in the Great Lakes, 2,500,000 tons in other inland waterways, 3,800,000 tons in coastal and intercoastal service, and about 7,500,000 tons in foreign service.

This, Adm. Land points out, envisages only a little more than a 50% in-

crease in the foreign use of U. S. ships, presuming either the carrying of a larger proportion of U. S. trade in U. S. bottoms or a general rise in the volume of international trade, or both.

● **Commission's Idea**—Separately, the commission's postwar planning committee has recommended a slightly different allocation of its recommended fleet of 12,000,000 tons: only 1,000,000 tons in the Great Lakes, 3,500,000 tons in other inland waterways and in coastal

and intercoastal service, and 7,000,000 to 7,500,000 tons in foreign trade (4,000,000 tons of dry cargo vessels, and 3,000,000 to 3,500,000 tons of tankers and other types).

The planning committee's attention to types in foreign service is regarded as a step forward because the actual tonnage total of the fleet is far less important than its composition—the tonnage relationship between dry cargo, tanker, "reefer," ore, and grain vessels, and be-

tween big, fast freighters and small specialized vessels.

● **Postwar Outlook**—It can be assumed that considerably less than half of the U. S. ships remaining at the end of the war will be put to work carrying U. S. trade. A great many may be sold to bolster the depleted fleets of our Allies. Many will be retired from service as uneconomical (some not worth recon-
tioning today are being scrapped). And there are serious proposals to immo-

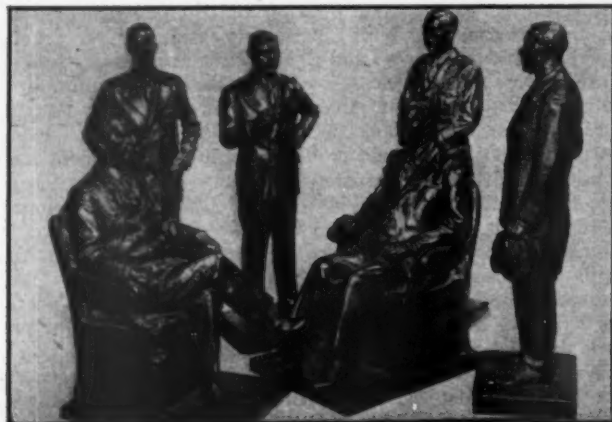


WASHINGTON FIGURES

Bolstering the visual record of this war period is the Smithsonian Institution's latest acquisition—a statue gallery of people who make history and news. Arranged in proper groups by the sculptor, Max Kalish (above, center), the 50 figures cover a wide scope of Washington personalities—from the President and his cabinet, through military leaders and agency administrators, to labor men and industrialists. In the labor niche (above, left), William Green, A.F.L., rests while the United Mine Workers' John L. Lewis glowers at the C.I.O.'s Philip

Murray. In the State Dept. group (above, right), a seated Secretary of State Cordell Hull is flanked by his Under Secretary, Edward R. Stettinius, Jr., and confronted by Nelson Rockefeller, Coordinator of Inter-American Affairs. Representing the military (left, below) are the big three of the Navy (left to right), Adm. William D. Leahy, Adm. Ernest J. King, and Secretary of the Navy James V. Forrestal, and the Army's top figures, Secretary of War Henry L. Stimson, Gen. George C. Marshall, and Under Secretary of War Robert P. Patterson. In the home-front general staff section are included (left to right)

Charles E. Wilson, former WPB executive vice-chairman; Marvin Jones, War Food Administrator; Paul V. McNutt, War Manpower Commission chief; James F. Byrnes, director of War Mobilization & Reconversion; Donald M. Nelson, former WPB chairman; Sen. Harry S. Truman, one-time head of the war investigating committee; Bernard M. Baruch, Byrnes' adviser; Chester Bowles, head of the Office of Price Administration. Donated by W. M. Kiplinger, Washington editor, the two-foot figures are cast in bronze—the metal having been obtained by melting down old statues of forgotten "immortals" of yesterday.





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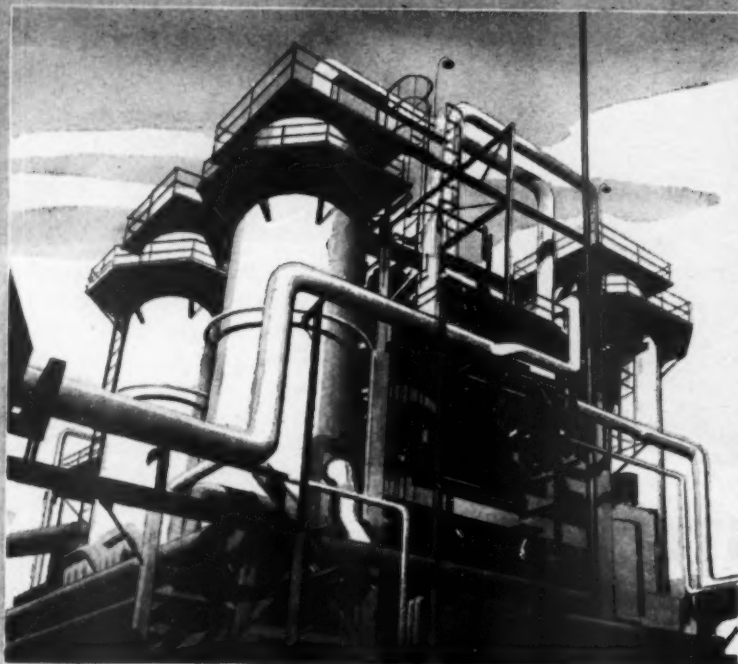
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CONSTANT-SUPPORT
HANGERS

lize, but maintain permanently in useful condition, an emergency cargo fleet of 10,000,000 to 20,000,000 tons.

Thus the specific size of the U. S. postwar fleet, particularly in its relation to the world's tonnage and to the merchant fleets of other shipping nations, is an academic question depending upon high policy decisions.

• **Unanswered Question**—The job of rationalizing the structure of the world's merchant marine, arriving at an equitable division of tonnage and routes among nations, and guaranteeing that world economic conditions will favor constantly enlarging postwar commerce, still remains to be attacked on an international basis.

Plant Bids Asked

DPC seeks buyers even before appointment of board to handle surplus property; actual sales must wait.

Defense Plant Corp., which will handle liquidation of most of the government's \$16,500,000,000 stake in war plants, isn't marking time while it waits for appointment of the new Surplus Property Board (BW—Sep.30'44,p17).

• **Properties Listed**—Although top policy decisions still are in doubt, DPC is busy taking stock of the \$7,800,000,000 of industrial facilities it now holds. In cases where the new surplus property law doesn't tie its hands, DPC even will start negotiations for sale to private operators (BW—Oct.14'44,p5).

This week, DPC's parent, the Reconstruction Finance Corp., published a 153-page "briefalog," advance listing of 879 projects that it expects to put up for sale sooner or later. DPC added a list of 94 plants and plant sites owned by the War Dept. that will be turned over to DPC for sale. The briefalog indexes plants by states and by size, giving a thumbnail description of the facilities and buildings. Copies went to railroads, banks, and chambers of commerce all over the country, as well as to RFC regional offices for distribution.

In addition to the briefalog, DPC is working up a series of brochures, one for each major plant, showing the floor plan, equipment, location, and other information. Prospective buyers will be able to decide from the brochures whether or not a particular plant is suitable for their needs.

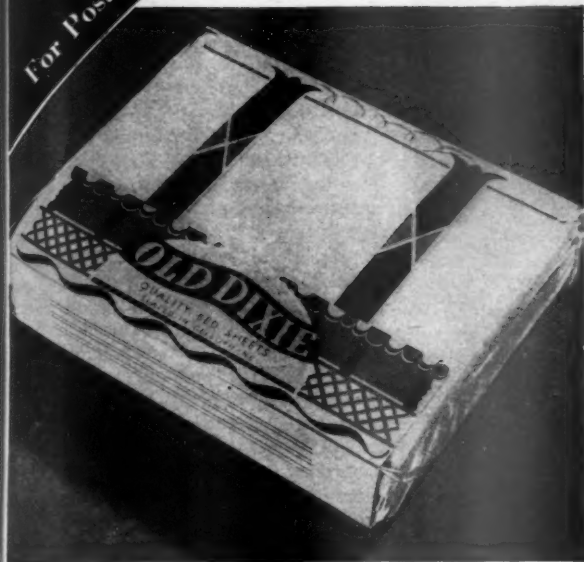
• **RFC to Aid Financing**—In the covering letter, Secretary of Commerce Jesse Jones invited businessmen, banks, and communities to come in and talk terms.

The RFC, he said, would be willing

Idea Corner

For Postwar Package Planners

SHEETS THAT TALK ... LOTIONS THAT LURE ... BEANS THAT REMIND ...



IDEA NO. 1 Visibility plus informative labeling lets the product do the talking. . . encourages self-selection. When sheets tell a fast, fresh story, watch the shoppers stop to buy.



IDEA NO. 2 Here's sparkling transparency to lure the shopper's glance . . . no carton to block visibility. In addition to protection against breakage, bottles will stack for a better display.

Basic Trends of Postwar Merchandising

Here are six fundamentals that will help to lower postwar distribution costs and speed up turnover. Use them to check your postwar package plans.

1. **SELF-SERVICE:** Emphasis on self-selection and display value.
2. **CONVENIENCE:** Size, shape, quantity, ease of use are predominant factors.
3. **INFORMATIVE LABELING:** Need for concise information, terse selling message.
4. **IMPULSE BUYING:** A high percentage of all buying done on impulse.
5. **PROTECTION:** Adequate protection geared to rapid turnover.
6. **VISIBILITY:** 85% of all buying done through the eyes. Visibility of primary importance in the package of the future.

Would you like to see more postwar packaging ideas? Just write: E. I. du Pont de Nemours & Co. (Inc.), Cellophane Division, Wilmington, Del.



IDEA NO. 3 "Beans tonight"—this package flashes its message to the shopper. Sales step up when the shopper is reminded to buy. Speaking of convenience—this bag has a special closure, making it easy to open.



Du Pont Cellophane

Better Things for Better Living . . . Through Chemistry

VISIBILITY . . . a powerful force in modern merchandising

to participate with banks in underwriting plant purchases. Communities were invited to bring in plans for postwar use of government-owned properties either on a single or on a multiple tenancy basis.

• **Ready to Negotiate**—DPC can't be sure that the new Surplus Property Board will designate it to handle plant disposal, but practically there's no other choice. Officials are going on the assumption that eventually all surplus Army, Navy, and Maritime Commission industrial facilities will be turned over to DPC for sale unless the services choose to keep them as standby plants.

Most of the selling will be done after the collapse of Germany, when V-E Day cutbacks clear the way for civilian production, but DPC is perfectly willing to talk business at once with any prospect, although no sales will be closed until the new board has been appointed, probably shortly after Congress reconvenes in November.

• **Three Restrictions**—DPC's willingness to discuss immediate sales is subject to three big restrictions:

(1) With few exceptions all its plants still are going full blast on war work. Purchasers may close the sale and take title, but they will have to keep the facilities on war orders as long as they are needed.

(2) The new surplus property law (BW—Sep. 23 '44, p7) places special restrictions around eleven major classes of facilities—aluminum, magnesium, synthetic rubber, chemicals, aviation gasoline, iron and steel, pipelines, aircraft, shipyards, transportation, radio and electrical equipment. The new board won't be free to approve sales of property costing more than \$5,000,000 in these categories until 30 days after it has made recommendations to Congress. The same thing goes for government-owned patents and techniques.

(3) About \$5,300,000,000 of DPC's investment is subject to purchase option held by the present operators. In addition, an undetermined (though probably small) number of plants owned by the War Dept. are subject to options.

• **90-Day Option**—DPC's standard option gives the operator the right to take over the plant at any time up to 90 days after it is declared surplus. The price is specified as cost less depreciation (5% on buildings, 12% on machinery, 25% on portable tools), or cost less rentals, whichever is greater. If the operator doesn't take up his option, he still has a right to match the best outside bid for another 90-day period, but the government is not required to sell below the option price.

Significant exceptions to DPC's practice of giving option rights to operators are aluminum, magnesium, synthetic



ARMY COST CUTTER

A well-braced footbridge over Fairlie St. in Atlanta, Ga., saves money and manpower while bridging the gaps in office work of the Army's Fourth Service Command. Connecting the Federal Bldg. with a five-story structure across the way, this 42-ft. span greatly reduces interoffice travel and conserves on messengers. The bridge is part of a recent consolidation plan under which Army units in 15 Atlanta buildings were relocated under two nearby roofs. Result is a 33% space saving, reduction of 600 employees, and uncounted savings in time.

rubber, and pipelines. In synthetic rubber and magnesium, the operators have a brief right of first refusal, but the government is not obliged to sell.

• **Army Plant Strings**—DPC's experts think that in most cases the price specified in the option is no bargain. They expect that few options will be exercised and that most sales will be handled by negotiation. Important exceptions may occur, particularly where plants were built before costs skyrocketed.

Options and other restrictions in the War Dept.'s contracts might prove a different story. The Army doesn't talk much about the facilities it has constructed. Even other government departments don't know the terms of its options in detail.

Most of the Army-owned plants are option free, but there are exceptions. Some contracts for synthetic ammonia production contain a five-year option to purchase at cost less 10% over-all depreciation annually, plus a 20-year right

of first refusal. In a few cases, the Army has agreed not to allow the new facilities to be put to commercial use for 20 years.

• **Clause to Be Scanned**—Officials in other branches of the government regard these special options with a suspicious eye. Some predict that there will be interdepartmental bloodshed if the operators try to exercise all their rights. Last spring, Attorney General Francis Biddle, testifying before a congressional committee, mentioned the 20-year non-commercial-use clause as something his department would want to review.

For the present, however, DPC doesn't have to worry about anything but its own standard option. Since most operators don't like the option price, the immediate problem boils down to negotiating a price that will suit both parties. If the operator doesn't want to make up his mind immediately, he can retain his option until the plant is declared surplus. But if the operator wants to close the deal now and if his plant doesn't fall into one of the eleven restricted categories, DPC is ready to talk business.

• **Will Test Market**—As a basis for the negotiated price, DPC is prepared to use estimated replacement cost, less depreciation. It will take account of special conversion costs and extraordinary expenses. Terms of financing and other conditions will be tailored to the individual case.

Once both sides agree on a price, DPC will make a test of the market by advertising that it is negotiating with the operator, and inviting other prospective buyers to deal into the game if they wish. At this point, the operator has to waive his purchase option, but he retains his right to match the best bid. If anyone else overbids him, he loses the plant and the newcomer gets it. Otherwise the sale takes place at the agreed price or at the best price established by the bidding.

• **Deals Pending**—DPC has a dozen or so discussions of this sort under way. Only one has yet reached the stage of advertising for other bids. In this case, DPC is negotiating with Chevrolet division of General Motors for the sale of a plant in Buffalo, N. Y., now used for manufacture of aircraft parts.

Officials think the Chevrolet case will provide a good test of their procedure. They are particularly anxious to see how other potential buyers react. Automotive men think Chevrolet will get the plant without much competition, partly because the big automobile companies are careful about stepping on each others' toes, partly because they think any company big enough to buy the plant either has one in Buffalo already or doesn't want one.

Co-Ops to Expand

Plans laid at Chicago convention for more stores in urban centers, and for program to get labor patronage.

Weakest point in the U. S. consumer cooperative movement is its inability to work city dwellers up to a real pitch of enthusiasm.

Leaders are less than complacent about last year's record-breaking \$750,000,000 total of consumer co-op business when they consider that only 25% is done in urban areas, which contain 75% of the people, 90% of the national income. Since Pearl Harbor they have added only 147 urban food stores, bringing the total to 1,200.

Seek Labor Trade—But nothing can bring wet-blanket a convinced cooperator. Keynote of last week's Centennial cooperative Congress in Chicago was the zeal with which 1,000 fervent delegates laid at least adequately ambitious plans to cover the cities with consumer co-ops.

Cooperators harbor an ambition—and last week worked up a program—to inculcate their doctrine in organized labor. The Cooperative League of the U.S.A. is now preparing to set up a Labor Service Division which a few years ago would not have been acceptable to labor-farmer co-ops.

Diversification Planned—Cooperators' own guess is that less than 10% of U. S. residents have heard of consumer co-ops. Co-op leaders feel sure they can raise this to 50% by standardizing trademarks, the co-op label, and by painting buildings and equipment in standard color combinations for flash recognition.

Postwar plans call for diversifying co-op products and services beyond their present predominant emphasis on farm supplies. Without adding to the present membership of 2,500,000 consumers, co-op statisticians calculate that sales volume could be tripled by 1950 if every co-op store would expand its services to other fields. An appropriation of \$10,000 for research on frozen food equipment is expected to spread installations of food lockers from the few hundred now existing into most of the 10,000 co-op retail outlets.

Foreign Market Eyed—The co-ops also plan to develop a large foreign trade. They are confident they can do so because: (1) European cooperatives have a good chance of being selected as distribution points in postwar rehabilitation plans; (2) one-fifth of the supplies moving in lend-lease have been



How to get uniformity in your national fleet

EVERY ONE OF YOUR TRUCK BODIES CAN HAVE THE SAME DISTINCTIVE LINES, THOUGH BUILT IN DIFFERENT SHOPS . . . NATIONAL SERVICE ORGANIZATION ASSURES QUICK DELIVERY, FAST, LOW-COST MAINTENANCE.

Truck bodies of Lindsay Structure, modern method of light steel construction, are identical when built to master specifications—even though assembled in different plants. Branches of your fleet may operate from a dozen different cities—yet the same style Ls bodies can be constructed for you in each. All Ls parts are die-formed, die-rolled, die-drawn, and die-cut to exact dimensions.

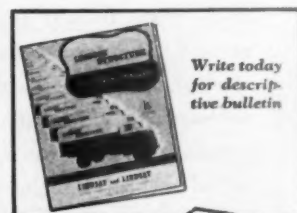
Uniformity in a national fleet of Ls bodies greatly reduces maintenance and replacement costs. Parts for Ls are interchangeable and readily available; profitless lay-up time is cut to a minimum, and replacements take less than two man-hours per panel.

In your post-war planning, check the possibilities of Lindsay Structure. Bodies of Ls—light, strong, and modern in appearance—are available in any desired size and style. Warehouses located at key points throughout the nation will assure quick delivery for your postwar needs.

Write for information. Send drawings, data, or blueprints to Lindsay and Lindsay, 222 W. Adams Street, Chicago 6, Illinois; or 60 East 42nd Street, New York 17, New York; Lindsay Structure (Canada) Ltd., Dominion Square Bldg., Montreal.



Lindsay Structure, with its "pre-tensed" sheets, achieves great strength and lightness.



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*It's what goes on **INSIDE** that counts*



Inside an engine Pedrick performance wins the votes

TRUE SHAPE... absolute flatness... life-long tension... these are the important characteristics in Pedrick piston rings that assure top performance for every job they are elected to do. They mean extra fuel and oil savings, more power, and longer life for each installation.

Pedrick piston rings are so accurately shaped that a light-test shows them to bear evenly against the cylinder wall all the way around. They are so flat that rings 2 inches in diameter can be stacked 6 feet high without wavering. Their life-long tension is accomplished through an exclusive, patented, Heat-Shaping process that fixes exactly the right amount of tension around the entire circumference of the ring.

Pedrick *precisioneered* piston rings for all kinds of engines, compressors and hydraulic equipment, deliver many extra hours of service. For automobiles, trucks and buses, *guaranteed* Engineered Sets, specially designed for each engine, restore efficient operation with real savings in repair time, parts, and labor. **WILKENING MANUFACTURING CO.**, Philadelphia 42, Pa. *In Canada:* Wilkening Manufacturing Co. (Canada), Ltd., Toronto.

Pedrick

precisioneered PISTON RINGS

originated by U. S. farm marketing and producing co-ops, which are spiritual, not blood, brothers of the consumer co-ops.

The delegates authorized incorporation of the International Cooperative Trading & Manufacturing Assn. (BW Mar. 18 '44, p. 102) to deal with foreign co-ops in petroleum products, food, and related supplies. But the guessing is that this association may be discarded in favor of reviving the International Cooperative Trading Agency, established in 1938, and shelved by the war. The revived agency would add manufacturing to its former function of distribution.

Co-op delegations from England and Scotland are en route to the U. S. to line up postwar international trade in oil, wheat, and other commodities. Foreign trade will strengthen the co-op domestic oil position and call for expansion beyond the ten refineries now owned.

● **Sour Note**—The delegates postponed "for study" a proposal to merge the Cooperative League of the U. S. A. (the official educational service federation of the movement), and National Cooperatives, Inc. (buying agency of 16 consumer cooperative wholesale houses in the U. S. and Canada).

Skeptics wondered whether the hard-headed, tough-buying businessmen of the agency preferred not to get themselves too deeply involved in proselyting activities fostered by the league.

● **No-Tax Protest**—The National Tax Equality Assn., mortal foe of the tax-exempt co-ops (BW—Apr. 15 '44, p. 17), timed a press release with the conference to blast at their special privileges. The year-old N.T.E.A. contends that the co-ops' "patronage dividends"—which are distributed to members from the earnings of the cooperatives—should be taxed as profits.

Co-ops retort that any business organization could distribute its earnings back to its customers prorata on purchases, and thus, like cooperatives, have no net income on which to pay taxes.

The National Assn. of Cooperatives, recently organized by co-ops and farm organizations to counterattack the N.T.E.A., plans to open headquarters in Chicago shortly. R. Wayne Newton, Lansing (Mich.) veteran worker in farm organizations, will head the fighting-back.

STATES' TAX POWER CURBED

States cannot tax lands held by the federal government, even when the land is merely held in trust for others, according to a ruling of the U. S. Circuit Court of Appeals in Denver last week. The ruling has interest throughout the West where, in some states, more than

READY—IN 17 SECONDS

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TYPED MATERIAL, OFFICE FORMS



In this case, the operator is feeding a draftsman's pencil drawing, size 17" x 22", and a piece of sensitized paper into the machine. Smooth-running conveyor belts speed both materials around the printing cylinder... after which the drawing is automatically released, and the exposed paper goes up across the dry-developing tank.

Here comes the Ozalid print... an exact duplicate—not a negative, of the original. You'll find it dry, ready for immediate use. And there's a very unique reason for the short time required—only 17 seconds... and for the fact that the print has black, or red, or blue lines on a white background—which ever color was desired.

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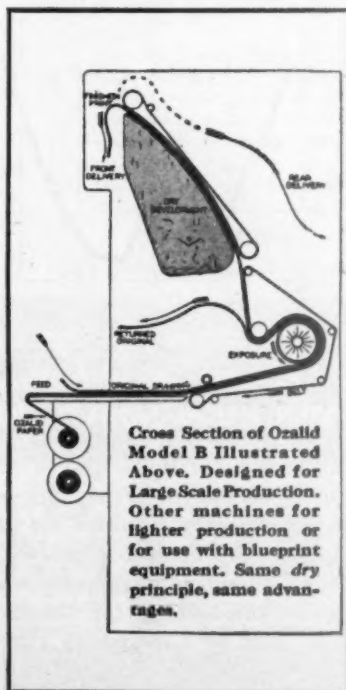
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50% of the land is in federal jurisdiction (BW—Aug. 26'44, p. 22).

The case decided in Denver concerned lands in the Wind River Indian reservation of Wyoming, held in trust by the government for the Shoshone and Arapahoe tribes. The lower court had held, in a suit brought by Wyoming, that the state could tax such lands. The circuit court held that Congress has not waived the government's tax immunity on such lands.

Mountain of Wool

Billion-pound supply piles up in the U. S. and effects are felt by sheepmen, wool marketers, lovers of lamb chops.

When the bleating sheep flocks scampered down from the Rocky Mountain ranges last month they ran smack into a type of crisis that is apt to become painfully familiar as peace approaches. A wool backlog, built up to meet war hazards that did not materialize, has become a grave threat to prices and hence to growers' pocketbooks.

• **Lamb Prices Drop**—With the future dark and government policies obscure, the rancher is being forced to liquidate

his flocks by selling his animals for slaughter.

To the consumer, starved for lamb chops and choice cuts of mutton, this would appear to be an ideal time for such sales. But it hasn't worked out that way. Price of lambs sold by farmers declined from \$13.20 per cwt. to \$12.10 between mid-June and mid-September. During the same period sheep prices dropped from \$6.60 to \$5.52.

Sheepmen say one reason was the action by the Office of Price Administration in restoring the finer grades of lamb to rationing (on July 1). It tended to stagnate demand for all lamb. More serious is heavy selling due to the disappearance of profits on sheep raising and prospects of worse to come.

• **Flocks on Wane**—Even ewes and ewe lambs, normally preserved for building up flocks, are now going to the butcher. Fat lambs (weighing around 75 lb.) are sold to the stockyards direct. But lean lambs (60 lb.) usually are bought for fattening by distant farmers, many of whom are in the rich Corn Belt of Iowa and Illinois. Such sales are made around Oct. 1 and must be closed at once where the rancher is financially unable or logically unwilling to do his own feeding.

This year sales of feeders slumped because of early doubts concerning the

sufficiency of the corn crop. So the sheep raiser was forced to sell his lambs to the stockyards. This means more (and leaner) lamb chops in the skillet right now but less spring lamb next year. It also means that the nation's sheep flocks, built up hurriedly and at high cost as during the War, have again passed the saturation point and are on the wane.

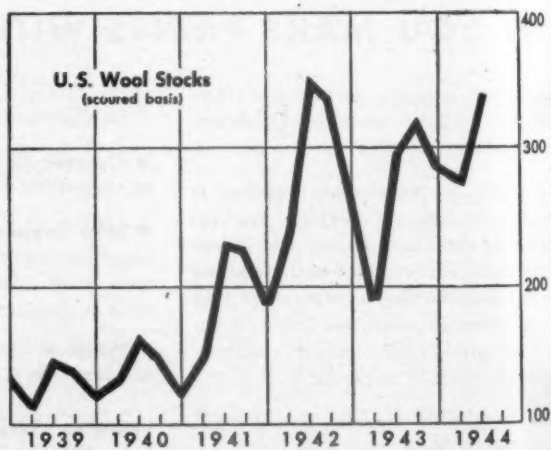
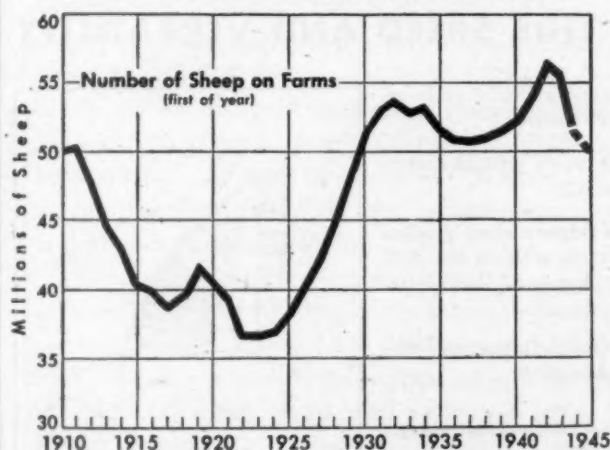
• **Slaughter Increased**—The Dept. of Agriculture figures that there were 51,718,000 sheep in the country on Jan. 1, 1944, which represented a drop of 7% from the previous New Year. The department claims that the decline is continuing at about the same rate and estimates the sheep population on Jan. 1, 1945, will be 50,200,000. In June, this year, slaughter of sheep and lambs ran 14% above June, 1943, and 26% above the five-year average.

Your sheepman, being a hardy soul and numerous enough to rate political consideration, has never taken his troubles in martyred silence. Right now he is yelling and the betting is that Washington will again supply relief, seeing as how a presidential election is in the offing.

• **Remedies Suggested**—The Commodity Credit Corp. bought the entire 1944 domestic wool clip, paying \$1.18 per lb. (clean basis) for the better grades. (Foreign wool of comparable quality cost

WOOL PRODUCERS EYE THE FUTURE

Cut size of flocks as supplies get out of hand



Data: Dept. of Agriculture, Dept. of Commerce.

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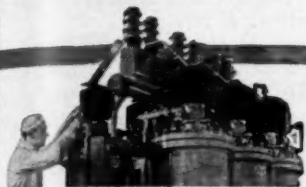
This week's announcement by the War Production Board that it had further liberalized restrictions on men's clothing dramatized for the consumer the unusual situation in wool stocks which is bothering wool growers throughout the country. Stocks held by Commodity Credit

Corp. and commercial users on July 1 amounted to 340,000,000 lb., scoured basis—equivalent to about 650,000,000 lb. of greasy wool. Since that time most of the 1944 clip has been bought, raising the net total to over 400,000,000 lb., scoured basis, the highest since 1921. In addition to these huge

stocks, the Defense Supplies Corp. and the British Wool Board hold a large quantity of wool in this country. It is no wonder that, in view of the tremendous stockpile of wool overhanging the market, sheep raisers have thought it wise to reduce flocks almost 10% in the past three years.

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VICTORY NEWS

Gas Turbines Take Up To 50% Less Space: Plans for a 5000 HP locomotive powered by 2 complete gas turbines have already been drawn up by Allis-Chalmers. Because of simple, compact construction, these turbines require just half the space needed by conventional engines—deliver their power with unusual economy.

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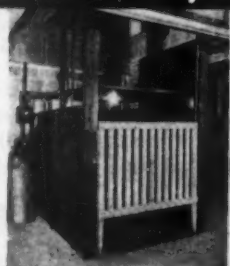


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\$1.03, which includes a duty of 34¢.) Sheep growers are demanding as good or better treatment for 1945, with some assurance of a continuing policy.

Specific remedies were suggested by the National Wool Growers last August. It approved the proposal of Dean J. A. Hill of the College of Agriculture of the University of Wyoming for the government (1) to take over all wool in the U. S. whether domestic or imported except that held for British account, (2) to sell the foreign wool at prices comparable to those of domestic wool, and (3) to continue this federal monopoly as long as the British continue their controls.

All wool produced in the British Empire is bought by the British Wool Board. Its tenure is supposed to end one year after peace, but Australian wool interests are demanding its continuance until three years after the war. ● **Sales in Boston**—Since February the U. S. has been trying to dig itself out from under its mountain of wool via auctions in Boston. These sales were opposed by some wool agencies on the theory that they would further undermine values, but the result has not proved frightening. Wool offered at these sales comes from imports gathered by the Defense Supplies Corp. when it was feared that the Japanese might cut off Australian and New Zealand shipping.

Fourteen of the auctions have been held at headquarters of the National Wool Marketing Corp., a group representing growers. The location is on gusty Summer St., the hub of the American wool trade, and the auction room is fittingly pervaded by the smell of unseen wool bales.

● **Huge Stockpile**—At these auctions a total of 189,553,000 lb. has been offered and 135,271,000 lb. (or more than 71%) have been sold, bringing to the government \$78,604,000. The percentage bid in has been rising of late owing to increased requirements for spring clothing. Main objection to the sales has been that the better grades of wool have already been sold.

There remain about 200,000,000 lb. of DSC's foreign holdings. This, added to CCC's domestic stockpile of 264,000,000 lb., the British Wool Board's 456,000,000 lb., estimated dealers' and other private stocks of 360,000,000 lb., makes a total supply in the U. S. of around 1,280,000,000 lb. The accumulation is more than enough for two years' peacetime or one year's wartime consumption. (The British have agreed to consult the U. S. government before selling any of their wool in this country.)

● **60% to Civilians**—Practice of the Army in specifying 75% domestic wool in military garments, and of the Navy in

using about 25% domestic is helping cut down the surplus. There are reports in the trade that large orders are to be placed by the Army to fill a gap in stockpiles; the Army in Europe is now clothed for winter. But withdrawals are offset by the approaching spring clip of domestic wool, huge warehoused supplies in Australia, and another surplus (of perhaps 500,000,000 lb.) in Argentina, which the WPB announced last week it would not continue to buy up.

In view of the figures, civilians are being allowed about 60% of wool supplies this year. It is just as well that men are still buying suits with their wonted caution as wools for good worsteds are scarce. Beneficial in melting down the oversupply is the lively demand of women for woollens. Allied relief purchases by UNRRA will help some but only 20% wool will go into textiles for this purpose. The big demand will come when 11,000,000 fighting men are mustered out and swarm into stores for civilian clothes.

PUDs at Polls

Washington state to vote on giving public utility districts power to form joint groups to buy and run private systems.

A major problem of Public Utility Districts in the state of Washington has been a provision of state law forbidding a district to purchase facilities outside its own boundaries.

● **Aim at Barrier**—This has made impossible the purchase by a Public Utility District—or a group of them—of entire electric power systems from private owners, who, understandably, are unwilling to sell their properties piecemeal.

It is common practice for the PUDs to acquire—usually through condemnation and at high cost—that portion of a privately owned company's facilities located within the district boundaries.

● **Battle at Polls**—At the general election Nov. 7, Washington state voters will decide whether the barrier shall be removed. They are to vote on a question of permitting two or more PUDs to form joint commissions to buy privately owned utilities.

What the voters decide will have a considerable bearing on the method of distribution of electricity from Columbia River dams, including the huge Grand Coulee, and Bonneville.

● **Commissions Proposed**—With lines sharply drawn, advocates and opponents of public operation of utilities are waging a lively debate before the voters. Advocates of the proposal claim it would

the expensive, piecemeal acquisition permitting joint commissions to buy revenue bonds a company in its entirety, even facilities in counties opposed to the PUDs. Two or more commissions, in turn, could form an authority to direct an even larger area. Each commission would be composed of the elected directors of the PUDs presented.

Under the proposal, commissioners could be permitted to sell or lease plants and lines to federal agencies, and that is where the giant Bonneville Power Administration comes in. Under federal law, Bonneville can produce electricity but can't market it, and has been active in promoting the PUD idea in the state of Washington.

Savings Disputed—Opponents of the proposition to be decided Nov. 7 dismiss claims that cheaper rates for power could result from public ownership with assertions that the proposition is "the latest scheme of public power politicians to seize" the private companies.

Any savings in charges for power, they argue, would be more than offset by the loss of around \$4,000,000 in taxes now paid by eight privately owned systems, because the PUD commissions could pay no federal taxes, and their state taxes would be only between 2% and 5.6% on their gross revenues.

Powers Assailed—But the main argument being made against the proposal is that it allegedly gives to a few PUD directors the right to form commissions and acquire property, without limit, and without a vote of the people.

Bonneville Feared—A fear of private utilities is that the Bonneville administration eventually would acquire the area's hydroelectric plants and distribution lines (BW—Apr. 1 '44, p. 34) leaving the commissions to distribute power only, a setup sought under the Bone-Smith bill to create a Columbia River power authority which died in committee in Congress in 1942.

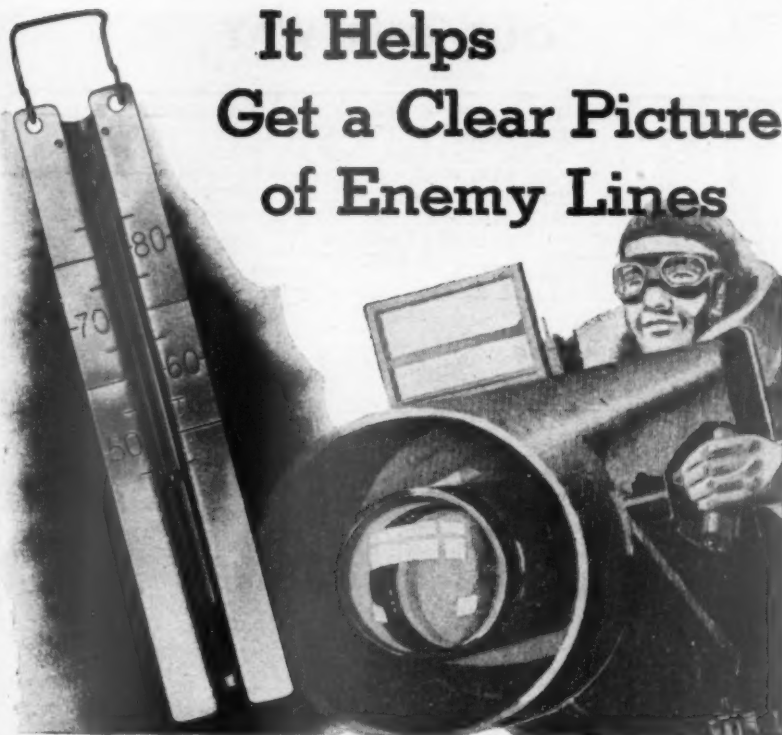
The Bonneville administration insists that passage of the proposition by the Washington voters would not enable it to retail electricity.

THEATER FIGHT IN OPEN

The battle of big theater networks to block the mushroom wartime growth of independently owned motion picture houses has been brought out into the open by WPB's refusal to approve any more applications for theater construction until the wrangle is straightened out. This may not be until settlement is reached on pending antitrust suits aimed at clipping the wings of some of the larger theater chains (BW—Aug. 12 '44, p. 82).

While big chains had been sitting

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Getting a clear picture of enemy positions depends upon the sharpness of aerial photographs. *Stainless* developing equipment like this tank thermometer is playing an important part in making flawless negatives. If temperature is either too high or too low in the developing liquid, the negatives may appear either too light or too dark—vital details may be blurred. Hence the need for an accurate thermometer that stays on the job.

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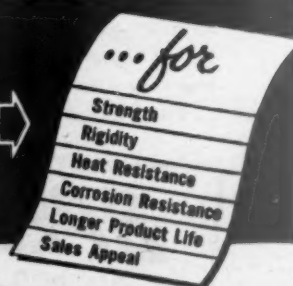
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tight with their present theaters, independents jumped into war boom and began putting up new houses. Some of this construction was encouraged by the Office of Civilian Requirements which had determined where new recreation facilities were needed. Single theaters planned for crowded areas had good chance of approval.

As a counter move, several of the chains recently filed blanket applications for hundreds of new theaters. Unable to approve these giant projects, WPA was forced to adopt the policy of refusing all applications.

Independent theater interests blame the rash of chain applications on the recent appointment of Claude E. Ezzell as Texas chain exhibitor, as consultant to the recreation section of OCR's Service Trade Division. Some of Ezzell's theaters are operated by the Interstate Circuit which is partly owned by Paramount Pictures, Inc.

The independents are about ready to raise a howl claiming that Ezzell's tactics have permitted independents no opportunity to protest about new theaters. Publication of the list of new applications has been discontinued.

MILKWEED HARVEST

Michigan and Wisconsin are maintaining their lead in the shipment of milkweed pods to the Milkweed Floss Corp. at Petoskey, Mich., as the harvest approaches its November windup.

The Petoskey plant, which processes the material to provide a filler for life jackets in place of war-blocked Javanese kapok and turns its entire output over to Defense Supplies Corp. for this purpose (BW—Aug. 12 '44, p. 22), has a call for 1,500,000 lb. to fill this year's Navy demands. In order to reach that goal, 7,500,000 lb. of dry milkweed pods will have to be collected against 95,000 lb. last year. Whether this quota will be reached cannot yet be ascertained as many bags are still to be shipped from storage in the Southwest where the harvest started in July. Collection of the pods, largely by children, has been extended this year to 26 states and Canada.

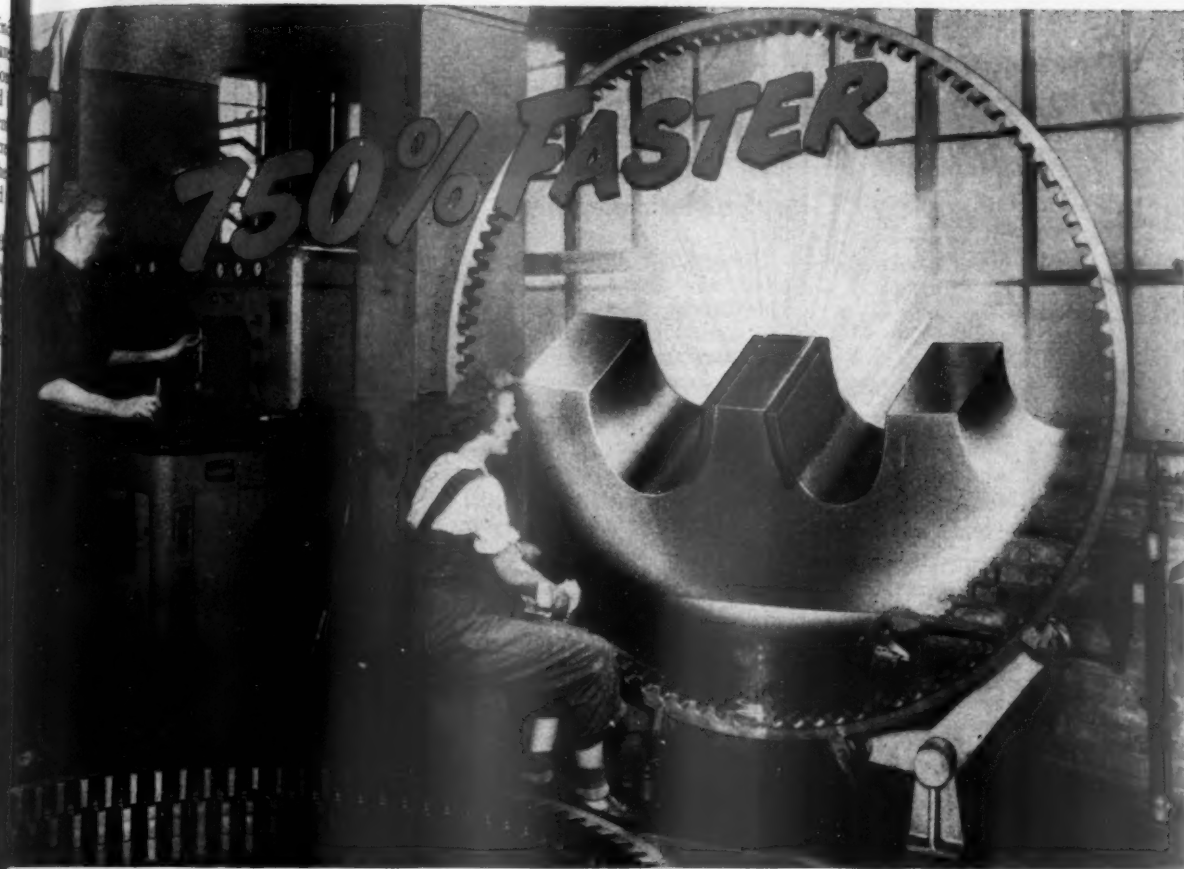
According to Dr. Boris Berkman, president of Milkweed Floss Corp., the company, now operating wholly as processing agent for the Defense Plant Corp., will go into commercial business after the war, turning out floss for life jackets, for upholstery and other uses, producing oil from the seeds and plastics from the pod shells. The company expects to put on the market a resilient, moisture-proof, odorless floss definitely superior to that imported from Brazil which has been reported in small lots in commercial channels.

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Fare Forecast

Turkeys will be easier to get than in 1943, but gourmets have reason to worry about the outlook for cranberries.

Holiday fare forecast for civilians: more and bigger turkeys through Thanksgiving and Christmas; cranberries, scattering and sparse.

• **Cranberries Short**—Turkeys generally get the limelight because they are the main dinner course. But the cranberry outlook this year has forward-looking gourmets viewing with alarm.

Last year's crop of 686,000 bbl. was no better than average. And the Sept. 1 crop report estimated this year's harvest at less than 420,000 bbl.—the smallest since 1921—of which fully half will be purchased by the armed forces.

• **Drought Cuts Yield**—Berries in Massachusetts—by far the largest producing state, with over 70% of the crop in 1943—came through the winter in fairly good shape, but both the yield and the quality of the fruit were cut sharply by this summer's heat and drought.

Second-place Wisconsin expects a

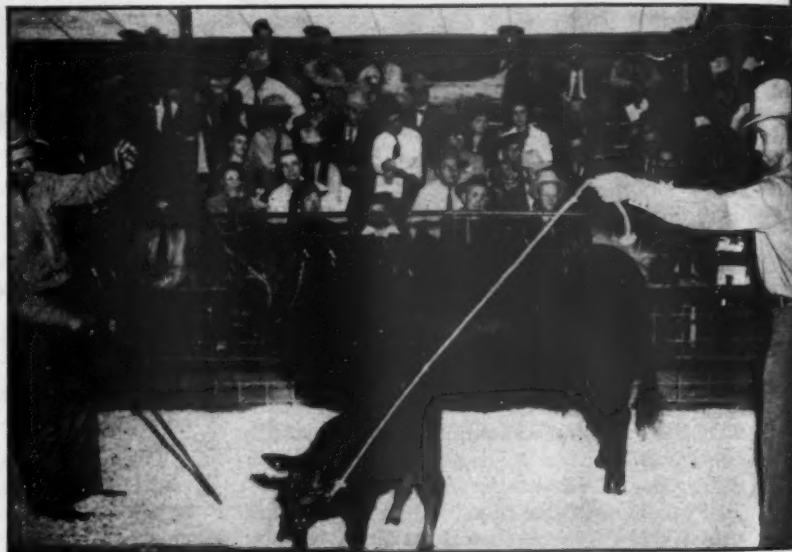
20% gain over last year, but that won't be nearly enough to make up for the lowered yield of the Cape Cod boglands. And a poor crop in New Jersey may offset gains predicted for Washington and Oregon.

• **Prices Controlled**—At the beginning of this month, the early black varieties from Cape Cod sold at Chicago for about \$28 a 100-lb. bbl. This compares with a price of \$19 to \$20 a year ago and less than \$10 in 1937, when the total crop reached 785,500 bbl.

On Oct. 6, however, OPA brought fresh cranberries for home use under price control for the first time (BW, Oct. 14 '44, p84). Ceilings are based on a season-average return to growers of \$24.23 a bbl. Retail maximum markups were announced on Wednesday of this week. Highest retail price will be about 41¢ a lb.

The turkey crop gives more cause for cheer. Output should approach 35,700,000 birds, 8% above last year, 4% above 1940's record crop, and 20% above the 1936-40 five-year average.

• **Turkey Forecast**—War Food Administration's recent order setting aside all dressed turkeys until the armed forces holiday needs are filled should worry no one. The Army-Navy will take 35,000,000 lb. more than last year. But



STEAKS ON THE HOOF

Bringing \$885, a carefully groomed Aberdeen-Angus cow and its week-old calf are typical of the fine cattle that commanded near-record prices at the Tulsa (Okla.) fair and livestock show last week. A bull of the same breed, selling for \$30,000, took top-price honors at the six-day event which attracted cattlemen from

twelve states and fanciers from all over the nation. Other fast beef producers—Herefords and Shorthorns—also were featured in the spotlight of wartime meat demands. More significant, however, is the growing interest in premium cattle in Oklahoma and adjacent Plains States. That trend would result in grass plantings which might prove the permanent salvation of the "dust bowl" areas of the thirties.

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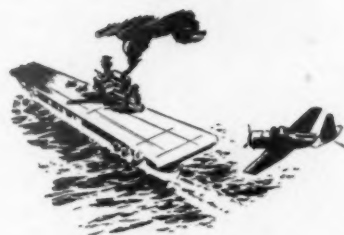
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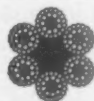
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LIFE INSURANCE COMPANY

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this still will leave more for civilians. The turkey production prospects, compared with last year, are (in thousands):

	1943	1944 (Est.)
North Atlantic	2,225	2,549
East North Central ..	2,986	3,695
West North Central ..	9,776	10,566
South Atlantic	2,343	2,447
South Central	5,634	5,444
Western	10,006	10,975

Leading state for 1944 is California with an estimated 4,260,000 birds—15% over last year.

Realization on the turkey crop turned out much better than expected. Producers' intentions on Jan. 1, 1944, pointed to only a 2% increase. But the owners' conservative plans were upset by their turkey hens' abundant laying, by unusually early and favorable hatching weather, and by a feed supply better than anticipated. The Army filled 8,000,000 lb. of its early needs with dressed hens that had served their purpose as breeders, releasing an equivalent tonnage for civilian consumption.

• **Thinner Varmints**—Sole unfavorable factor: the unprecedented depredations of coyotes and other varmints which have multiplied in the South and Southwest while hunters and ammunition had wartime engagements elsewhere.

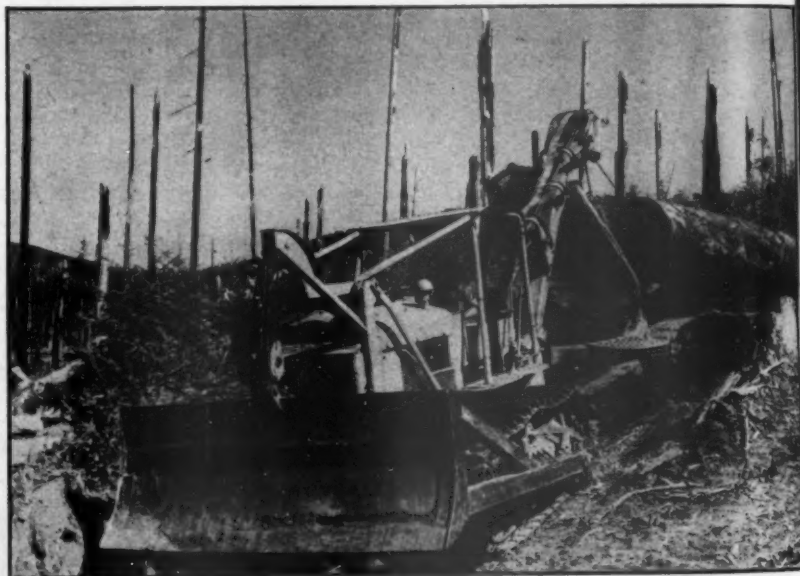
Louisiana Citrus

Anticipating biggest crop of oranges in its history, state aims for postwar citrus eminence. Orange wine may help

Louisiana citrus growers are looking forward to an orange crop this year that may reach as high as 500,000 boxes. This figure may well be considered small potatoes in comparison with a nationwide crop of about 100,000,000 boxes but it represents by far the largest Louisiana orange crop in history, and augurs well for the state's ambition to be a factor in orange growing after the war.

• **Thinner Rind**—Louisiana boasts, on the basis of tests conducted in 1938 by Louisiana State University, that its oranges are tastier than those from other states, have a thinner rind, and at least as much juice, sugar, and nutritional value.

Citrus fruit has been grown in Louisiana for almost 200 years. It was introduced by the Jesuits in 1750, and was purely a local-consumption crop until the introduction of modern packing methods and refrigerator cars. The



FROM THE DEAD

From gaunt stands of burned-over forests in the Pacific Northwest, loggers are salvaging valuable timber from the charred snags of Douglas fir trees. Made economical by favorable prices, such operations have recovered some 20,000,000 b.ft. of lumber in the past

few years. Besides providing critically needed lumber, this work encourages new growth, reduces fire hazards, and opens roads for fire patrols. Typical salvagers are the Snow Peak Logging and Hammond Lumber companies which report that damaged timber is usually suitable for both sawing and plywood peeling processes.

AVOID PRODUCTION DELAYS

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Century
**Totally Enclosed
Fan Cooled Motors**

The Vital Parts of the Motor Are Isolated from Chips, Dust, Abrasives, Cutting Solutions.

The operating parts of the Century Totally Enclosed Fan Cooled Motors are completely enclosed in a rugged frame, so that the windings are protected from destructive atmospheres.

A large fan blows a blast of air between the laminations and outer frame — keeping the motor cool and clean and further adding to motor life in destructive atmospheres.

If your electric motors must operate in atmospheres containing destructive dusts, chips, cutting solution fogs, abrasives, or similar destructive materials, find out how Century Totally Enclosed Fan Cooled Motors can help prevent production delays. A Century engineer will be glad to discuss your problem with you.

CENTURY ELECTRIC CO.

1806 Pine Street St. Louis 3, Missouri

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TEFC with fan protecting housing removed showing the fan and the openings between the laminations and outer frame.



Century TEFC heavy end bracket.



TEFC frame and field winding. Note the long fit between the frame and end bracket.



But Prossy doesn't live here any more . . .



Dealers die in wartime, too. Some three year old lists of active accounts can be cut in half . . . How many of 1941's good customers are still good—or even customers? . . . Exclusive outlets, existing on odds and ends, may be merely ex . . . Former fat territories will test mighty thin on first calls . . . Firms never heard of in your field before are being heard from . . . Uncle Sam's orders were big and easy to get—but all the little orders to replace them will take a lot of hard scratching . . . And 1941's prospect cards gather more dust than dollars!

THIS is a good time to start sales records and reports that work, make possible and available any analysis or comparison needed, and to store up

facts while they still mean something.

McBee custom-builds records that are suited to your particular needs . . . supplies streamlined information to streamline selling . . . to keep markets, territories and men properly appraised . . . to show up strong spots and weak sisters! McBee methods are suited to ordinary office personnel, are operated without special machines or special skills . . . and are in use in thousands of firms, saving time, clerical expense and effort . . . saving worry and waste for management, too.

Even if you haven't returned to civilian selling yet, this is a good time to make plans, and talk to a McBee man! Call any office . . .



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industry got a major setback when the groves were almost completely destroyed by the hurricane of 1893, and had to be started over from scratch from Florida planting stock.

• **Orange Wine**—A sidelight of the industry which may do much to put Louisiana oranges on the map is the use of about 5% of the crop in the production of wine. Orange wine is a medium-dry beverage, about 18% to 20% of alcohol by volume, with a characteristic flavor.

There are two wineries now operating, with a combined annual capacity of 20,000 gal. Although the wine is popular locally, it is practically unknown in other sections of the country, but Louisianans see in the current shortage of European wine a golden opportunity for a national promotion drive.

WFA YIELDS ON PEPPER

Last March the War Food Administration reached for the nation's pepper shaker and found it almost empty. Pepper importers were keeping their whole pepper in storage rather than selling it at OPA's price ceiling of 6½¢ a lb., a figure which they said didn't cover original cost, storage, and other carrying charges, to say nothing of a profit.

WFA, hot under the collar, ordered seizure of 6,500,000 lb. of the 46,000,000 lb. in storage in an attempt to force importers to sell (BW-Apr. 1 '44, p. 44). The importers, demanding to know when pepper became necessary to the defense of the nation, told WFA to go without seasoning.

This week WFA tossed in the sponge, telling OPA it had exhausted every means at its disposal for bringing U.S. stocks of whole pepper into normal market channels. Fred M. Vinson, Director of Economic Stabilization, was told by WFA that an increase in the maximum price was the only way out.

OPA lifted the ceiling price of whole Lampong black pepper from 6½¢ to 10¢, the price that the importers demanded last March. WFA said it expects that the importer-dealers will now offer pepper in whole form only. OPA added hopefully that the price increase will not result in an increase at the retail level.

FREE VITAMINS DENIED

A manufacturer should not be required to furnish coffee, doughnuts, and vitamin pills free to its employees, an arbitration panel decided in settling a dispute including 16 other issues between the Continental Can Co., Los Angeles, and C.I.O.-affiliated employees.

NATURAL GAS

Gas for Industry

1,265 mile pipeline is almost ready to increase supply to area hard hit by pressure loss in zero weather.

The dwindling natural gas reserves which have imposed plant shutdowns in the heavily industrial Pittsburgh-Youngstown-Cleveland area during every cold snap in recent years will receive a 200,000,000-cu. ft. daily reinforcement shortly after Nov. 1.

• **Construction Delayed**—Although delayed by some of the worst floods in 37 years in rivers between Corpus Christi, Tex., and Cornwall, W. Va., a 24-in. pipeline built for the Tennessee Gas & Transmission Co. still will have been completed in 70% of the time required to lay the "Big Inch" despite the fact that the pipelines are approximately the same length.

The engineering difficulties encountered in the 1,265 miles were hardly less sensational than the political furore which accompanied the Federal Power Commission's granting of the certificate of necessity to T. G. & T. rather than to Hope Natural Gas Co., Standard Oil of New Jersey subsidiary, which also had applied for the certificate.

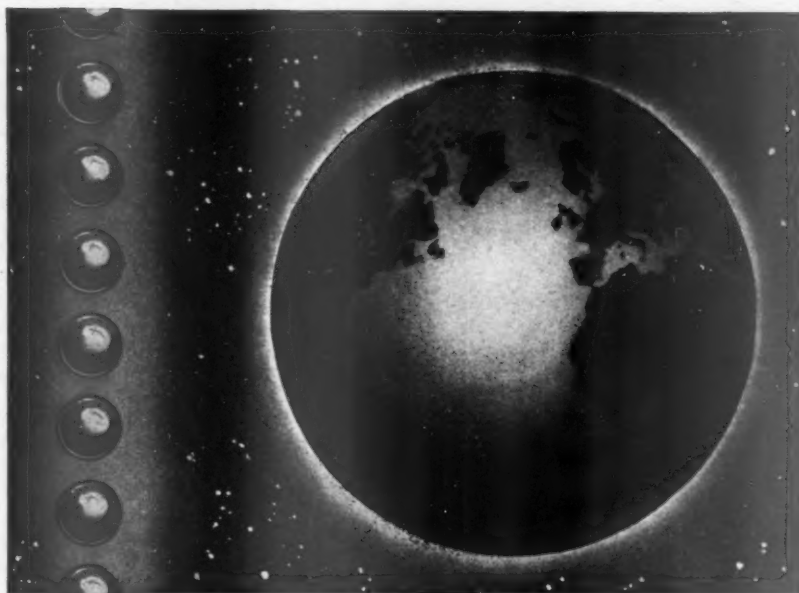
• **Fees Investigated**—Lt. Col. Curtis B. Dall, president of T. G. & T. and President Roosevelt's former son-in-law, was called upon by a subcommittee of the Senate Interstate Commerce Committee considering the renomination of FPC Chairman Leland Olds to explain.

The senators' curiosity extended to fees in connection with the sale of 90% of T. G. & T.'s stock to the Chicago Corp., which had found itself backed into the gas business by way of oil field investments (BW—Feb. 12 '44, p. 26). Discounting hints of favoritism, the Senate confirmed the Olds appointment.

• **Storage Problem**—Hope Natural Gas will receive a major share of gas from the new line, feeding it into the distribution lines of the East Ohio Gas Co. and other urban systems. Columbia Gas & Electric will get a portion.

The \$54,000,000 line became feasible partly because of developments in natural gas storage, in which Hope and East Ohio have pioneered (BW—Aug. 10 '40, p. 40).

Economics of the pipeline operation require a constant 100% load factor which means storage in the summer



Because nothing rolls like a ball...

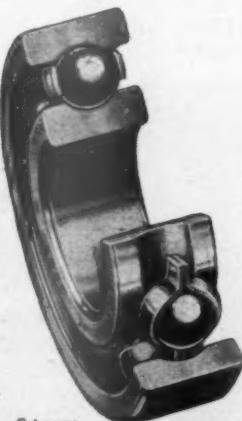
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It can well be said that our way of life *depends* on the ball bearing—for most every mechanical device known to man, somewhere, somehow, has ball bearings in its family tree.

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Cut-away view of New Departure Ball Bearing



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months. Conventional low pressure holders, costing about \$80,000 a million cu. ft. of storage capacity, are useful within very narrow limits. Storage in steel cylinders at high pressures costs approximately \$200,000 for a million cu. ft. of gas.

• **Stored in Cylinders**—Thus East Ohio solved a problem when it developed in Cleveland a method of storing gas by liquefaction, reducing it thereby to 1/1,600 in volume. Four heavily insulated steel cylinders, with a diameter of 70 ft., have now been built at a total cost of \$1,700,000, or the equivalent of \$7,100 a million of their 240,000,000-cu. ft. storage capacity.

Regasified from its temperature of -250F, this volume is sufficient to meet any sudden increase in demand, such as is likely to arise in a zero morning.

• **Wells as Reservoirs**—But the important reservoir for storage is the hundreds of exhausted or partially depleted wells. Fifty of such storage areas in the U. S. and Canada contain an estimated 135,000,000,000 cu. ft. of gas.

In the Appalachian fields, which are fighting a losing battle against depletion—having 6% of the total reserves and 16% of the consumption—the program of underground storage is being accelerated.

A typical operation is East Ohio's Chippewa field. There are 18 wells in an area of some 6,000 acres.

• **Pressure Built Up**—A 1,020-hp. compressor station has built up the gas pressure in the subterranean sand strata to 1,000 lb. At this pressure they contain 6,000,000,000 cu. ft., including 3,250,000,000 cu. ft. in the field at the time storage was started.

At 1,000-lb. pressure, gas can be withdrawn from the area at the rate of 25-

000,000 cu. ft. a day; at 500 lb., 8,000 cu. ft. daily.

• **Future Outlook**—Economically, the significance of the development is protection for the chains of industrial communities that have grown up about natural gas deposits.

Prophets in the industry foresee a resumption of natural gas shortages in the Appalachian area for a decade or more.

With eventual depletion of the Texas fields, they envision the prospect of underground storage of gas manufactured from coal in the West Virginia fields, and a reversal of the present flow in the pipelines.

Pipeline Project

Three California utilities ask priorities on materials for 30-in. natural gas line to serve the Los Angeles area.

Plans of three California utilities to build a 30-in. diameter 1,000-mile long gas pipeline from the Texas Panhandle to the Pacific Coast at a cost of \$60,000,000 were disclosed last week when Pacific Gas & Electric Co. of San Francisco filed a registration statement with the Securities & Exchange Commission preliminary to offering \$115,000,000 of refunding bonds for sale.

In San Francisco P. G. & E. revealed that its partners in the pipeline undertaking are Southern California Gas Co. and Southern Counties Gas Co., Los Angeles subsidiaries of Pacific Lighting Corp.

• **Priorities Asked**—The War Production Board already has been asked for



A final step in preparing the Texas-West Virginia gas pipeline for service is a mechanical wrapping operation to cover the line with a special insulation.

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equipment priorities, and construction of the pipeline is scheduled to start in 1945 if the Federal Power Commission grants permission and if the SEC approves the financial setup.

Financing plans call for a separate company which will sell between \$40,000,000 and \$50,000,000 of bonds.

• **Difficult Terrain**—The 30-in. pipeline—6 in. greater in diameter than Big Inch or the new natural gas line to serve Pennsylvania and Ohio (page 49)—will stretch from the vast Hugoton Field in the Texas Panhandle to the natural underground gas storage pool at La Goleta, near Santa Barbara, Calif. Hugoton Field is owned by Phillips Petroleum Corp. of Bartlesville, Okla.

The pipeline, which will be designed for a daily capacity of 300,000,000 cu. ft. of gas, will follow generally the route of the Santa Fe Railroad, and compressor stations will be set up at five places along the route. Its builders will have to solve difficult engineering problems, for the pipeline must cross deserts, mountain ranges, and swift rivers, as well as a corner of the Grand Canyon. It will be laid underground.

• **Link to Los Angeles**—At present the bulk of California's natural gas supply comes from wells in the Kettleman Hills and San Joaquin Valley, both in the northern part of the state. The proposed pipeline would provide an independent supply for southern California, and will give P. G. & E. the entire California output for distribution in the northern section of the state.

The Southern California Gas Co. now is building a 101-mi. long pipeline from the La Goleta pool to Los Angeles. This link, which will cost \$4,000,000 and is scheduled for completion by Nov. 15, will provide 7,000,000 cu. ft. of gas an hour to meet peak demand in Los Angeles.

• **State's Reserve Dwindles**—Before the war, experts believed that California's natural gas reserves were sufficient for another quarter century, perhaps longer. But the state's sudden growth in population and industries since 1942 created such an additional drain that some authorities believe the reserves may peter out within a decade.

Mushrooming Los Angeles, with its extremes of temperature, presents difficult supply problems and requires huge gas reserves to meet peak demands. These can be met by draining part of Texas' vast reserves into La Goleta where they can be tapped by the feeder pipeline now under construction.

• **May Strike Snag**—In addition to obtaining the approval of federal agencies to build the big pipeline, the California utilities also may have a fight on their hands in Texas and Oklahoma.

People in both states are beginning

If you want to cure this office headache...



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TO RETYPE!

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TO THROW PAPER
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DAYS!

IT WASTES
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T44-11

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to object to what they call the drainage of resources. A leader in the mounting opposition is Beauford Jester, chairman of the Texas Railroad Commission, who objected to piping of Texas natural gas to the East, contending that it should be held in Texas for industrial expansion in the Lone Star state.

There was talk this week that bills will be introduced in the Oklahoma and Texas legislatures to tax gas pipelines, a measure calculated to discourage further construction.

• **Another Applicant**—Two weeks ago application for priorities for a line similar to the one proposed by P. G. & E. was also filed with WPB's Office of War Utilities by a Metropolitan Gas Co., which listed its address as 50 Church St., New York City. Details of the pipeline—for that matter, of the company itself—were not divulged. OWU asked for further information.

Filing of the P. G. & E. plan, however, would seem to cut the ground out from under any other project, since P. G. & E.'s Los Angeles partners in the project are the dominant consumers in the southern California market.

COTTON

It Will Be Picked

Despite shortage of farm laborers in the South, WFA is confident that none of this year's cotton crop will be left to rot.

Scare stories have been going the rounds in the South to the effect that half of this year's 12,000,000-bale cotton crop will have to be left to rot in the fields for lack of pickers. But War Food Administration officials suggest that all such rumors be taken with salt.

• **No Worse Than Elsewhere**—WFA's Office of Labor says the shortage of farm labor in the South is no worse than elsewhere; that with the help of imported labor and war prisoners all the cotton will be harvested.

WFA also points out that the government has guaranteed almost full parity for this year's crop (BW—Oct. 7 '44, p. 21). And no matter how grave the problems he has to face, no cotton grower is going to let his crop rot when even low-grade fiber will bring 12¢ a lb.

• **WFA Has One Worry**—But there is one fact that is likely to lower the quality of the cotton—and the return to the grower—to a substantial degree. Ordinarily, cotton in different areas opens

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at different times, simplifying the labor problem. This year, due to vagaries of weather, much of the crop seems to be ready for picking all at once.

This means that a lot of cotton is going to stand around for a while after opening before it is picked and, particularly if a rainy spell turns up, there will be shedding and quality deterioration.

• **Fewer Hands Available**—October estimates indicate a reduction of 410,000 hands in southern farm employment as compared with the 1935-39 average, but only 18,000 fewer hands than October last year, when the cotton crop ran about 11,500,000 bales. Of course, farm families rather than hired labor pick the bulk of the crop.

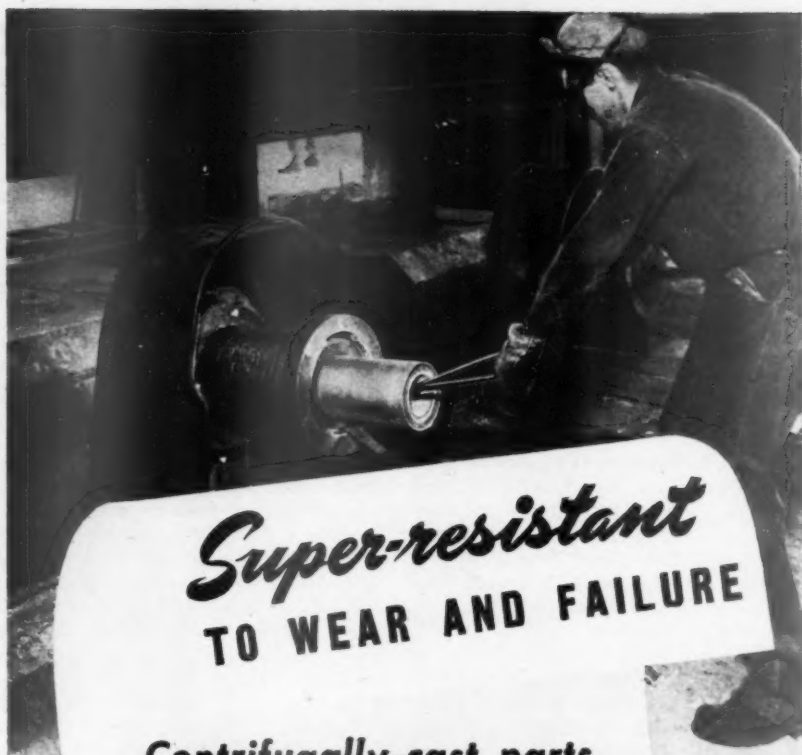
To offset the wartime drop in farm labor, what hired hands there are are working longer hours, and many more farm women, children, townspeople—as well as war prisoners and foreign workers—not commonly a part of the farm labor force also are working on fall harvests.

Picking should be easier this season due to a record average yield of 285 lb. an acre. Wages for pickers average 3¢ a lb.—three times the prewar rate.

• **More Seed to Crush**—One result of this year's larger cotton crop will be more seed available for cottonseed oil and meal. And this is likely to be a lifesaver for some southern mills. Last season WFA shipped 23,000,000 bu. of midwestern soybeans to be crushed for oil and meal in southern cottonseed mills. This year, due to increased midwestern crushing capacity, less than a third of this volume is expected to go to southern crushers.



Teacher and pupil work together in a Texas cotton patch to help harvest a banner crop which Washington says is not endangered by lack of labor.



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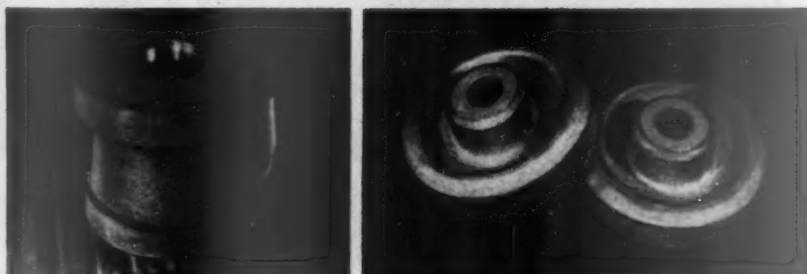
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Mechanical Crop

Mississippi plantation uses one-row pickers on cotton crop raised entirely with machinery. International cooperates.

One day last week mechanical cotton pickers moved onto a 28-acre field on the Hopson Planting Co.'s plantation near Clarksdale, Miss., to harvest what is believed to be the first commercial cotton acreage ever raised entirely by machinery with no hand labor at any stage.

• **Profits in Progress**—The two Hopson brothers operate 4,000 acres of rich Mississippi Delta land. This year they have 2,000 acres in cotton. Notably progressive, they have long welcomed use of their fields by International Harvester Co. for testing and developing its cotton-crop machinery.

Thus they own seven International one-row cotton-picking machines (BW—Nov. 27 '43, p69), which most big Delta plantation owners would give an arm to use this fall. An eighth machine, a two-row picker which the manufacturer owns and still considers experimental, is working for them under control of Harvester engineers.

• **Hand Labor Elsewhere**—In this year when U. S. planters have been hard-pressed for field hands and right now are frantic for pickers (page 52), the Hopson all-machine cotton field is par-

ticularly significant. Except for this one field, the Hopson brothers have not gone into exclusive machine-production of cotton, the last big hand-labor crop on American farms.

But they are using so many tractors, planters, flame-throwing weed-killers, and picking machines that they are easily getting by with far less than the 200 or so Negro families that they would require for the crop under the Delta's tradition of one family or 3½ workers for each ten acres of cotton.

• **Only Odd Jobs Are Manual**—Those cabins on the Hopson plantation that are now occupied by cotton hands are principally for the men who operate the machines. Their families provide sufficient miscellaneous field labor to handle the odds and ends of cotton growing that are not yet fully converted to machinery.

Machine plowing and cultivating of cotton have never presented any special difficulties. A mechanical planter that handles corn or cotton equally well has long been a standard, big-selling farm machine in the South.

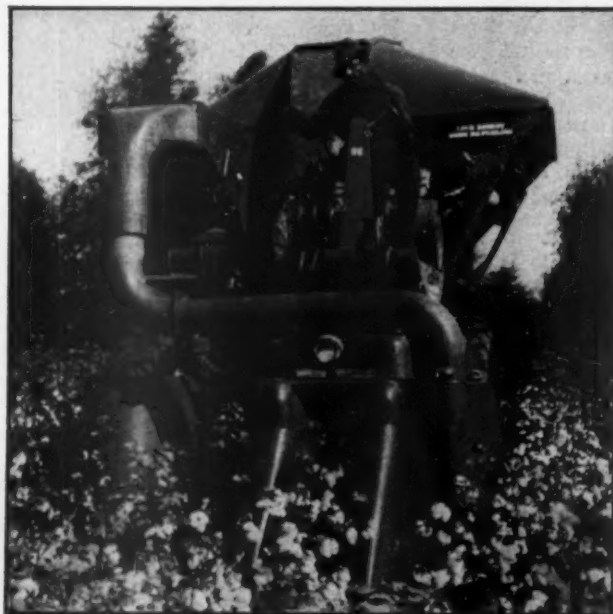
• **Fuzz Makes Trouble**—One characteristic, however, made cottonseed difficult for machine planting. When cotton is ginned, there remains attached to the seed very short, unspinnable fibers known as linters. These linters can be removed and they regularly are from that portion of the seed crop which goes to the crushing mill (they can be sold for conversion into cellulose used in rayon and nitrating). But even if the cotton grower were to get the linters

removed from the seed that he keeps for planting, he would still have to contend with a plushlike fuzzy nap on the seeds which makes them ball together. In such shape they would still drop out of the planting machine in twos or threes or sixes and field hands would have to hoe out, or "chop," the weaker surplus cotton plants.

The Hopson plantation specializes in selling cottonseed for planting, and has developed ways to sort out the more promising seed. Also, the company operates its own gin, and can put the cottonseed through a process by which the peachlike fuzz is partially removed. The powdery linters that result have a ready market among the makers of cellulose.

• **Acre Cost No Higher**—The delinted seed loses enough of its stickiness so that a machine can plant it a seed at a time. The Hopsons sell delinted seed at about double the price of gin-run seed. They plant less than 50% as much to the acre. The acre cost of delinted seed is said to be slightly lower. But the really important advantage is that delinted seed planted at proper intervals produces plants far enough apart so that they require no thinning, hence no chopping.

To get rid of the weeds in its cotton fields, the Hopson plantation makes use of a flame-throwing weed killer. As the flame thrower passes along the row, the flame burns out every plant except cotton. The woody cortex of cottonstems resists the flash flame. Half a dozen flame treatments during the



International Harvester Co.'s self-propelled cotton picker cleans off one row of bolls (left) in each sweep of the



field—depositing them in a large wire-screen hopper. A hydraulic lift makes the picker self-unloading (right).

...ing season were sufficient to keep
 on this year's weeds.
Leaf-Cutting Dust—To include as lit-
 trash as possible, cotton to be ma-
 chine-picked should be picked from
 less plants. This is achieved by dust-
 the field with airplane-spread pow-
 er. The method is the same as is used
 spreading poison to kill boll weevils.
 The material used for defoliation is ordi-
 nary granular cyanamid fertilizer ground
 to a fine dust. A week after application
 the cotton plants drop their leaves.
 Machine-picked cotton contains extra
 trash and averages one grade lower
 than hand-picked, bringing a reduction
 in market value of about \$10 a bale. But
 the difference in cost of production out-
 weighs these factors. Hopson ginning
 machinery is not yet equipped to do the
 extra special job of cleaning that is
 required to bring machine-picked lint
 to hand-picked grade, but plans are
 under way to take this step after the war.
Foreign Trade at U. S. Wages—The
 Hopsons consider that machine-
 production offers the best hope for
 cutting costs and thus regaining for-
 eign markets for U. S. cotton. Mechan-
 ization should permit higher wages than
 skilled hands are worth in world
 markets.

Picker Is Ready
 Rust brothers' mechanical
 cotton picker, redesigned with
 Allis-Chalmers aid, faces test in
 the field next week.

The farm machinery industry has
 long wondered whether the Rust cotton
 picker, first such machine announced as
 successful (BW—Nov. 27 '43, p. 70), would
 ever get a chance to prove itself in com-
 petition under big-league management.
Shipping Next Week—The answer is
 yes. After months of experimental
 work successfully concealed from out-
 side knowledge, Allis-Chalmers Mfg.
 Co. had to open the doors wide enough
 to get two newly completed experi-
 mental models into the shipping room.
 These two mechanical pickers were built
 under the company's La Porte (Ind.) works
 under license from and personal super-
 vision of John D. Rust. Next week they
 will be shipped south for a workout in
 the only place where a mechanical
 picker can really prove itself. In Texas,
 Kansas, and Mississippi Delta cotton
 lands, the harvest is well along (page
 7).
 Two major farm equipment com-
 panies already have cotton-picking ma-
 chines. International Harvester Co. an-
 nounced its one-row machine two years

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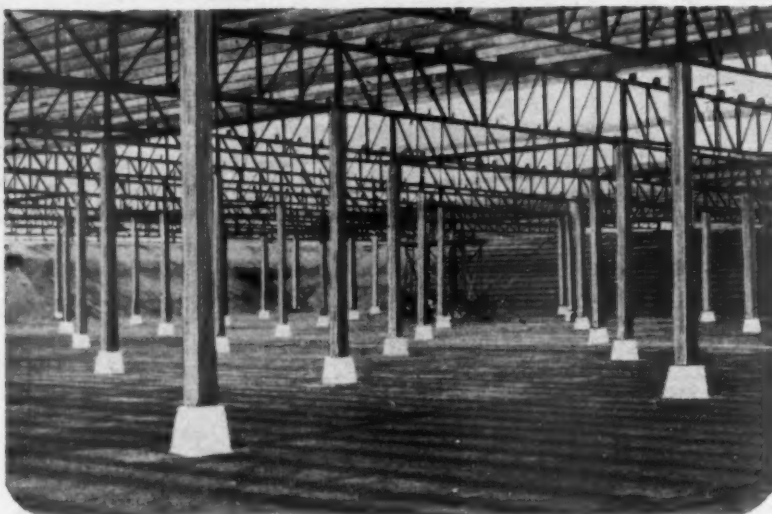
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"Keep this under your hat"

SAID THE ENGINEER TO THE RESERVOIR



Important function of a reservoir roof is to cut down evaporation losses. Wood does that well, because it's an excellent insulator. But even with wood roofs, water vapor makes a pass at getting out, is caught by the roof and condenses there. And being damp all of the time is tough on any material.

This is where the Wolmanizing process steps into the picture. It protects the wood that protects the water. Being deeply impregnated with Wolman Salts* preservative, Wolmanized Lumber* is highly resistant to decay.

Tank builders learned long ago that the use of this vacuum-pressure treated wood saves them a lot of worry and cash. So, too, have other builders, architects and owners discovered that it pays to employ Wolmanized Lumber wherever there's danger of decay (or termite attack).

American Lumber & Treating Company, 1656 McCormick Building, Chicago 4, Illinois.

*Registered trade marks

WOOD THAT'S



FOR SAFETY AND ENDURANCE

AMERICAN LUMBER & TREATING COMPANY

ago, makes no secret that it has a two-row machine under field test (page 58). Deere & Co. last winter purchased rights to the Berry rotary-type machine and hired its inventor to develop it to commercial perfection (BW—Jan. 12, 1947, p61).

• **Biggest Open Market**—If the machines that Allis-Chalmers is shipping perform as well as expected by the engineers who have been working on them, there are likely to be three to four starters in the postwar race. Cotton picking is the biggest farm machinery market remaining unexploited in the U. S.

Allis-Chalmers executives frankly say they might have delayed the unveiling a few weeks longer. They emphasize their connection with the Rust picker is as yet indecisive. Official position is that these two experimental machines were built for John D. Rust, who would use them in custom picking while company engineers check the operation.

• **To Prevent Unemployment**—When John D. and Mack Rust introduced their mechanical picker with fanfare, the brothers were convinced that the invention would make them rich. But also they felt a sincere obligation not to upset the economic and employment balance of the cotton states.

To guard against such havoc, they set up a foundation for the benefit of the field hands and assigned to it shares of their future profits. But if Allis-Chalmers takes over the machine, it probably will do so with no strings attached. In the interval, the brothers have had hard financial sledding and have not at times seen eye to eye.

• **Working for Stake Money**—The Rusts' picker has suffered from lack of development capital. Playing their cards close, the brothers have generally taken their models into the good cotton areas and have done custom picking for pay.

With money thus accumulated, paid a few thousands from other sources, the Rusts have built their improved model. Thereafter, they have gone into the cotton fields to make another stake, pay for translating their newer ideas into steel and sheet metals.

• **Improvements Sought**—Principal difficulty of Rust pickers previously reported from the South is their heavy weight. They have accordingly required a good deal of power for operating, and have not always done too well on hard soil.

Allis-Chalmers engineers have been working to eliminate difficulties. The units now being shipped are the two-row type designed to operate on Allis-Chalmers two-plow tractors. What happens from here on will depend largely on how well the altered Rust pickers can headed south pick cotton when they get there.



Now IS THE TIME TO GET *Down to Earth*

The post-war problems of reconversion clamor for solution right now. If your problem involves vital precision

parts, we can help you.

With 34 years' experience, our knowledge of design, metallurgy, machining, grinding,

lapping and plating is available to you. We work in iron (Electalloys), steel, aluminum, white metals, bronze and magnesium. We are now ready to advise and help on any problem involving soft or hardened and ground precision parts.



*Awarded to two plants
McQuay-Norris Ord.
Management Division*



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PRECISION WORKERS IN IRON, STEEL, ALUMINUM, BRONZE, MAGNESIUM

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You know it like your own front yard, if you smoke a Kaywoodie. So welcome, satisfying and good, the flavor is unforgettable. Every Kaywoodie Pipe is fashioned and proportioned so that it draws out the best from tobacco, remaining cool, and being entirely free of any taste which would interfere with the fine flavor of your smoke. Kaywoodie briar is Nature's best, non-fibrous, fine in texture, and suited to a fine pipe. Comes only from the regions around the Mediterranean Sea. Always the same. Known 'round the world.—If you've been unable to find Kaywoodies lately, it's because of great demand by the Armed Forces. We're sure you'll agree that we must serve our fighters, first! Kaywoodie Company, New York and London. 630 Fifth Avenue, New York 20, N. Y.



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BRIAR

PRODUCTION

Figures Improve

Mathematicians use sound statistical principles to upgrade quality of plant products. WPB trains factory men at colleges.

Anyone but a mathematician might find it hard to wax optimistic over statistics as a likely tool with which to improve the quality of a plant's production or to reduce the spoilage of the work in process.

• **Courses Offered**—But scrap reduction and quality improvements achieved by industry through the strictly statistical approach have been so substantial that WPB and the U. S. Office of Education are jointly sponsoring at major colleges a nationwide series of study courses in quality-control statistics.

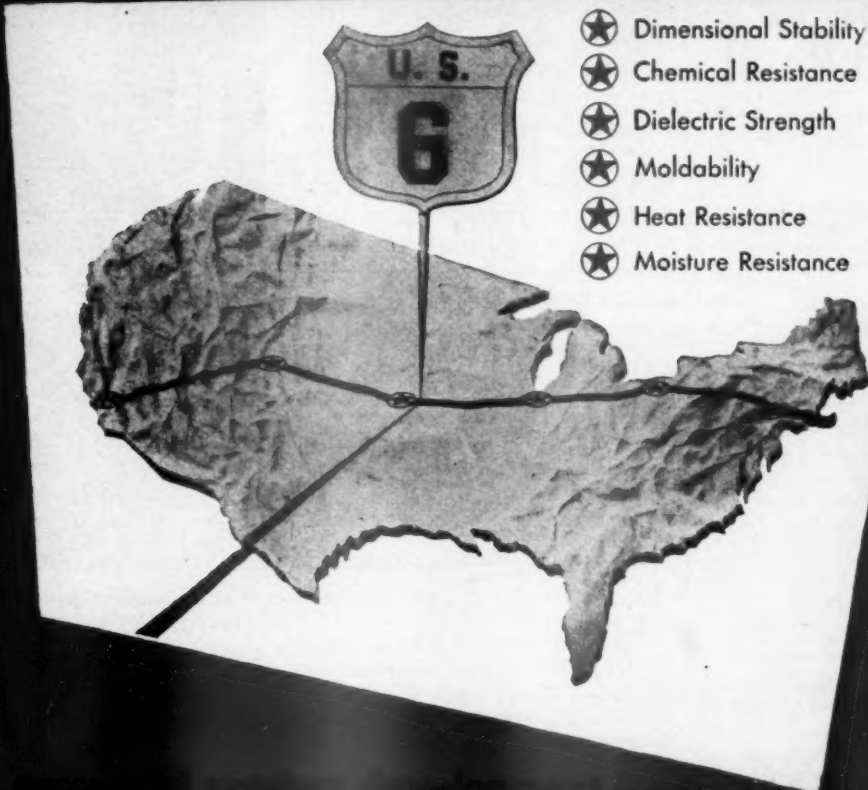
The men who have been working in this field glibly roll off instances of savings achieved through quality control of processes by statistics. A Chicago plant had two old Cleveland screw machines which were considered practically ready for junking—until the quality men plotted their output on a graph, showing they were doing good precision work with an occasional piece far outside the correct range. Relatively minor repairs stopped the abnormal variability and put both machines back in top condition.

• **For Quality Specialists**—The idea got under way two years ago without government sponsorship at Palo Alto and Los Angeles as a pet project of Prof. Holbrook Working, now on leave from Stanford University to head up the job for WPB. Students in these courses are plant production men responsible for keeping products to specifications. They hold such titles as quality-control eng-

CLEAR ROAD AHEAD

Their cargoes a military secret until recently, truck convoys bearing B-29 bomb-bay sections from the Goodyear Aircraft plant in Akron for assembly at Glenn Martin's Omaha plant continue to get the green light throughout their 900-mi. run. The sections, lashed to special trailer trucks, are escorted over the highways of five states by relays of police in radio cars. They contact control stations to keep roads ahead clear, and only railroad trains get right of way over the express convoys on their three-day trips.





Probably no sign is more familiar to the experienced, cross-country motorist than the roadside shield bearing the letters of a U. S. highway. To him, it says: "You're on the main highway... the best road... the sure route to your destination." There's a main highway in plastics, too. Its sign says **PHENOLICS**—and it's the popular route to successful product development.

In thinking of the future, the progressive manufacturer naturally is giving a great deal of consideration to plastics. To this manufacturer, we suggest following the main highway... the phenolic plastics route to successful product development. For the phenolics are the most versatile of all plastics—offering a wider selection of properties which make the going much easier for the imaginative designer and engineer. Such qualities as... dimensional stability under all types of climatic conditions... heat resistance... moisture

resistance... impact strength... unusual electrical properties... diversity of finishes... moldability—exemplify the versatility of phenolic molding compounds.

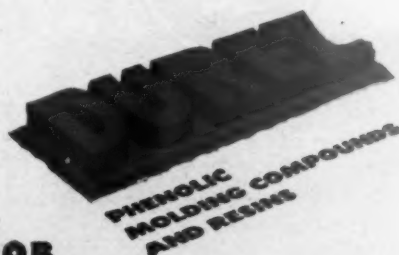
Durez has been specializing in the development and manufacture of phenolic plastic molding compounds for over twenty years. As a result, there are more than 300 versatile Durez compounds from which to select a plastic to fit your job.

Undoubtedly your designers and engineers are working on the development of some new product—the material for which may present a problem. We suggest that, first, you consult your custom molder. Many new methods of molding and processing make his service more valuable than ever before, and he is equipped to advise you.

After this preliminary discussion, we suggest that you and your custom molder take advantage of the experi-

ence and the wealth of data which Durez technicians have accumulated through active participation in the successful development of many plastic products over the past quarter century. These aids are always available for your benefit.

Any further assistance which the Durez staff can give to you and your custom molder toward the successful development of your product will be given most gladly. Durez Plastics & Chemicals, Inc., 210 Walck Road, North Tonawanda, N. Y.



PLASTICS THAT FIT THE JOB

**PHENOLIC
MOLDING COMPOUNDS
AND RESINS**

RCA MUSIC REDUCES ABSENTEEISM



MUSIC combats fatigue and boredom—the underlying cause of absenteeism. Pleasing music improves the workers' attitude toward job and employer.

SELECTED RECORDINGS, provided by an RCA Industrial Music Library, are broadcast throughout your plant at scheduled periods, usually at the opening of a shift and during morning and afternoon fatigue periods. Mealtime programs may be varied by including bulletins of personal interest to your workers.

MR. H. B. BASSETT, VICE PRESIDENT, THE ACME WIRE CO., New Haven, Conn., says, "Music in our plant is an important morale builder. It improves production . . . reduces absenteeism."

BESIDES REDUCING ABSENTEEISM with music, a sound system provides the facilities for locating key personnel instantly; for issuing instructions and emergency signals; for spreading announcements to all parts of your plant, without interrupting work progress.

IF IN ESSENTIAL WORK, an RCA engineered sound system is available for your plant. It will provide proper coverage and reproduction regardless of size of plant.

SOME USERS of RCA sound systems that subscribe to RCA Industrial Music Service are: Food Machinery Corp.; P. J. Ritter Company; Atlas Powder Company; Baldwin Hill Company; Columbia Steel and Shafting Co.; A. P. deSanno & Son, Inc.; Converse Rubber Company.

A 16MM. SOUND FILM, "Manpower, Music and Morale," running 18 minutes, is available on loan. A new booklet of the same title will be sent you free on request. Write for booklet or information about film bookings to: RCA Industrial Music Service, Box 70-107A, Camden, N. J.

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Tubes . . . Phonographs . . . Records . . . Electronics

PAINTING MACHINE

Charles F. Carroll, Cleveland inventor, displays his new machine for putting the glow in luminous instrument dials on planes, tanks, and other military vehicles. By coating cellulose acetate film with .008 in. of radium paint, this device eliminates tedious hand painting. Painted strips, ranging upward from 1/64 in. wide, are pasted in place over numerals and indicators with an adhesive which forms a permanent bond; repainting is done by peeling off the old strip and replacing it. Claimed to be the first of its kind, the machine is designed to relieve skilled hand painters who average about 25% rejections at best. Carroll and his machine are doing work for Jack & Heintz, Inc., Sperry Corp., and Bendix Aviation Corp.



neer, chief inspector, production manager, and product engineer.

This week the 25th course, held at the University of Iowa, graduated after eight days of intensive study 70-odd industrial supervisors. Sole reason why there were not 170 is that Iowa City's hotels are crowded.

• **Three More Coming**—Next week a similar college course starts at Texas A. & M. (College Station, Tex.). Then in quick succession come North Carolina at Raleigh and Illinois at Urbana.

What the statisticians have learned to do is to harness the laws of chance to the tasks of production. Most industrial rule-of-thumb procedures for quality control, mathematicians point out, blandly ignore the principles of probabilities, variation, and measurement.

• **Statistically Silly**—The usual sampling systems for accepting or rejecting purchased raw materials or parts are frequently cited. Acceptance sampling commonly inspects a given percentage—usually every 20th piece unloaded, or one piece from every case received.

If the sample fails to pass scrutiny, the entire shipment or case is rejected; or it may be subjected to 100% inspection at the supplier's expense.

• **Tailoring Sampling to Need**—If practically every incoming shipment contains one defective piece—as is not unlikely—then, by statistical standards of truth, such sampling as cited almost invariably gives the wrong answer. The mathematics of acceptance sampling is highly technical, but if properly applied it can build up an accurate, statistically sound system.

Most widely known—and applied—system of this sort is the set of tables developed by Army Ordnance for its contractors. In essence, this provides three different sets of sampling inspection procedures according to expectable quality. The supplier whose goods average normal or above-normal gets off easily. But the supplier who consistently averages low quality takes such a beating in rejections and charge-backs that he is forced either to improve his product or to quit.

• **Inspection Cost Cut 50%**—This method was applied at a plant where the management had been using rule of thumb, with a substantial factor of safety. It cut acceptance sampling cost 50%, without loss of quality.

Favorite illustration of the statisticians is the problem of judgment involved in rolling dice with a stranger. If he wins the first throw, and continues winning, or wins far more than half the throws, at just what point should the loser decide that he is up against trained dominoes?

• **Loaded Dice, or Fair?**—If the victim knows the mathematics of probabilities, he is likely to quit long before the typical participant in a crooked dice game has sense enough to pull out.

Parallel reasoning underlies applying mathematics to quality control. No machine or assembly line can produce every unit to be exactly accurate, and management traditionally leaves well enough alone as long as production falls within acceptable limits of accuracy. But to set proper limits and maintain them, say the mathematicians, requires



Proposed Detroit American Legion Memorial Home, Derrick and Gamber, Architects, Detroit, Michigan.

\$2,000,000 Detroit Legion Memorial Home

Blueprinted and Ready to Go!

America's Veterans of World War I are preparing in many ways for the organization and employment needs of millions of newly discharged servicemen.

A typical project is this new American Legion Memorial Home in Detroit, Michigan, where a probable 75,000 new Wayne County Legionnaires will have a place to organize, relax, and carry on the Legion's program of Americanism. The Architects state that the building will include an auditorium seating 2,500 persons, dance floor, assembly rooms, bowling alleys, squash courts, handball courts, bars, cafeteria and restaurant, lounge, administrative offices and card rooms. The building will be 340 feet long by 260 feet deep, with ample parking facilities adjacent to it.

Many hundreds of people will be employed in the related construction activities of this big job when civilian building is resumed. Multiply this project by the thousands across the entire nation, and you have a practical, long-time source of employment for ten million people in the allied building industries.

But actual planning and blueprinting for America's much-needed modernization, conversion and new construction must be started *now*. The time lapse between thinking about a job and actually breaking ground for it is long. Don't delay . . . get together with your architect and engineer today . . . and lend the force of your project to the postwar stabilization of the nation.

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IT'S TOO LATE TO DO
Anything
ABOUT THIS FIRE

HERE'S HOW TO OUTFLANK FUTURE FIRES

Most plants have "hot spots." Yet, even in these locations, fires that start big and fast, can usually be extinguished quickly . . . if you get at them *soon enough* with enough of the right extinguishing medium.

A Cardox Fire Extinguishing System—engineered for the specific hazards it covers—extinguishes both large and small fires, indoors and outdoors, by a timed mass discharge of Cardox CO₂. This non-damaging, non-contaminating fire extinguishing medium—stored at 0°F. and 300 p.s.i. in a single storage unit containing 500 pounds to 125 tons—is instantly available in TONS for large fires, in POUNDS for small ones.

ENHANCED CO₂ PERFORMANCE

Enhanced extinguishing performance is possible because—as controlled and applied in Cardox Systems—(1) Cardox CO₂ has uniform extinguishing characteristics regardless of plant or atmospheric temperatures; (2) Applications can be engineered to the requirements of each indoor and outdoor hazard covered; (3) High CO₂ snow yield provides increased cooling effect (carbon dioxide released at 0°F. yields 45% CO₂ snow); (4) Effective projection through relatively great distances is achieved—even outdoors.

Write on company letterhead for Bulletin 10104

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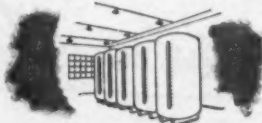
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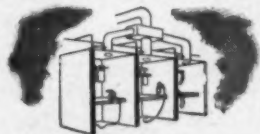
CARDOX
CO₂ FIRE EXTINGUISHING SYSTEMS

FOR EXAMPLE

These are "hot spots" . . . one large . . . one small . . . typical of the hundreds where fire extinguishing performance provided by Cardox Systems assures maximum protection.



Here highly flammable oils are stored in long rows of tanks, each holding 10,000 gallons. If fire strikes, the Cardox System floods this huge room with cold, inert carbon dioxide in which fire cannot exist.



Spray Booths, relatively small in size, can start big fires. Local direct application of Cardox CO₂ prevents spread of fire and gives quick extinguishment within the booth and exhaust ducts.



Cardox CO₂ is maintained at controlled low temperature of 0°F. and 300 p.s.i., and is supplied instantly from a single storage unit.

the use of sound actuarial principles.
• **Odds and Tolerances**—If a machine is under control, the variability of properly spaced samples of its production, when graphed, will be at random and will fall on or acceptably close to the normal curve of variation.

Suppose limits of 0.999 in. and 1.001 in. on a 1-in. screw-machine piece. If the first sample comes out 0.9994 in., the next 0.9992 in., the next 0.9996 in., and practically all samples inspected show on the low side, or if their range of variations exceeds predetermined mathematical probabilities, this points the need for positive action.

• **What Does It Mean?**—The machine setter may need retraining, or the machine may need repairs. The steel may be soft, or a tool may have slipped.

Statistically unsophisticated inspection gives no warning until rejections exceed the allowable. But variations analyzed by sound statistical principles permit applying corrective measures before costs rise just as the odds-wise craps shooter quickly quits a crooked game.

• **Enough But No More**—Graduates of WPB's courses in statistical quality control aim to inspect only the statistically necessary number of samples, to measure only the essential qualities. They balance variations in accuracy of production against mathematical probabilities. And they expect to catch trouble promptly if it occurs.

Ballistics accuracy testing of ammunition at the U. S. Rubber Co.-operated Milwaukee Ordnance Works was costing \$1,500 to \$2,000 a day. When a target of ten shots showed a radius greater than allowable, a larger, more expensive retest was fired. The retest usually showed no unacceptable variations.

• **Less Testing Needed**—The statisticians graphed target results, thereby proved that the occasional extrawide variations were random accidents of no real significance, hence required no retests. Result: Testing costs dropped about 75% without affecting acceptability to the Army.

The quality had been there all the time, but excessive tests were needed to provide assurance until testing was put under scientific statistical control. Several other instances at the same plant made comparable savings.

• **Money-Making Cases**—Paul Peach, WPB expert on statistical quality control who came from Milwaukee Ordnance Works, estimates that destructive or failure tests used in industry cost on the average 50% above what the mathematics of probabilities requires, and often gives no assurance of quality.

A shell loading plant's powder charges ran less accurate than the quality statisticians knew was mathemati-

ally attainable. Rounding the corners in the loading chamber of the machines brought quality up to expectations, at no added operating cost.

The Lukas-Harold Co. of Indianapolis retrained its operators to set drills and boring mills correctly when the graphs showed they were setting to make holes small. Thereby it reduced rework and scrap—and made another, wholly unexpected saving of about \$7,000 a month because the less tight fit of gages in the holes reduced gage wear and consequent scrapping.

• J. & L. to Aberdeen—Army Ordnance has made tremendous savings at Aberdeen (Md.) Proving Ground, where the statistical quality control is headed up by a statistician borrowed from Jones & Laughlin Steel Corp. after his mathematical computations had substantially reduced destructive testing, and thus increased usable production of armor plate at its Aliquippa (Pa.) works.

Price Squeeze?

That's fear of mill supply distributors aroused by OPA's recent policy letting middleman absorb manufacturer's increase.

Mill supply distributors face the prospect of having to absorb some or all of future increases in manufacturers' prices. This, together with the imminent ending of government protection over their domain, is modifying their enthusiasm for an enlarged postwar industrial market.

• Sales Forecast—For the long pull, trade statisticians have figured that if the country's peacetime economy reaches proportions prophesied by the more moderate economists, distributors' sales should range between \$1,450,000,000 and \$1,800,000,000 in a normal year. This compares with the \$890,000,000 sold in 1939. Working under forced draft during the war the industry operated at an annual volume of about \$2,250,000,000.

But the rosy postwar horizon seems far away just now for distributors of cutting tools, power transmitting equipment, hand tools, precision measuring instruments, pumps, electric tools, and the thousands of other items that classify as mill supplies. OPA has them nervous with its recently expressed policies for letting the middleman absorb the cost of increased prices at the manufacturing level. And before long, they know, WPB bars must be lifted to permit the entrance of new competition.

• The Tipoff—OPA showed its hand in a press release telling of an advance

PROBLEMS IN MEASUREMENT GO BACK TO Ancient Greece



Archimedes, more than 2,000 years ago, was directed by the ruling king to determine whether the royal crown was fabricated of pure gold or of gold alloyed with silver. He was baffled because when two metals were alloyed he had no means of measuring either. Then one day he discovered that equal weights of gold and silver displaced different amounts of water and he could measure the water. Thus one of the earliest problems in measurement was solved.

When Industry first conceived the idea of precision manufacture of interchangeable parts on a production basis, it faced even a tougher problem than Archimedes solved.

It was recognized even then that if this dream were ever to become a reality, inspection would have to be rapid as well as precise. Most of the measuring instruments then commercially available were of the slow cumbersome laboratory type which were unsatisfactory for rapid production inspection.

Among the pioneer leaders who found the solution to this important problem were modern research engineers such as those at Sheffield. Experienced and mindful of their responsibility, encouraged and guided by tradition, yet remaining free of prejudice, they developed gages and instruments which utilize all known means of amplification—each where it is most effective. These include electricity, air under pressure, light, optics and mechanical amplification.

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in the manufacturers' price of work gloves. The agency said there would be no increase in the consumer price, but that wholesalers and retailers would get somewhat less than their historic percentage margins.

Work gloves may be considered somewhat outside the strict category of mill supply items; so may soil pipe and paper towels, in which a similar procedure has been followed. But they are an indication that the shadow is creeping closer, and manufacturers of industrial tools, supplies, and equipment, who have already absorbed rising costs without asking for permission to increase prices, say they have had about enough.

● **Price Pyramid**—OPA will allow manufacturers to charge more, when necessary, to insure continued production of essential articles. But the original advance will be pyramided dangerously if, at each level of distribution, the regular margin of profit is added to the increase. Thus an addition of \$10 to the manufacturer's price might amount to an advance of \$20 or \$25 to the consumer.

The industrial distributor's position is that his operation involves only one step between manufacturer and user, hence no long chain of markups. His markup is usually about 25%. His costs have gone up instead of down, since selling has given way to service

and this effort has expanded considerably in answering the urgent wants of war plant customers.

● **The Hard Way**—Although OPA has shown a willingness to listen, distributors say that an appeal is an inadequate solution to their problem because (1) while the appeal is being considered the distributor goes on paying the increased price without adding it to his resale, and (2) if price advances become widespread, it will be impossible for a distributor dealing in 20,000 or more items to appeal all the cases affecting him.

One possibility is that dealers may be permitted to add to their prices the same amount of the advance as posted by the manufacturer, without applying their traditional margin to the new price. Percentagewise they would come out with less than the margin they always have had, but realists concede that tradition is less important than avoiding the full absorption of all future advances in manufacturers' prices.

● **Era Passing**—Uneasiness over the government's pricing policies takes some of the edge off the benefits distributors have enjoyed during the war while selling in a restricted field. This era is about over. It has already begun to fade, and will pass completely when merchandise is in easy supply.

In the early days of shortages WPB had a stiff fight on its hands to justify the existence of distributors' stocks. The Army and Navy couldn't see why scarce items should lie on merchants' shelves when there was desperate need for them in expanding war factories.

As a compromise, a policy was evolved whereby WPB would lend assistance to distributors in purchasing for stock but would do its best to prevent new distributors from entering business or old distributors from stocking new lines. Exceptions were made in cases where current stocks were insufficient to meet changed local needs, or where expanded local activity warranted the installation of additional lines as well as quantities of stock.

● **Bargain Kept**—WPB stuck well to its bargain. While distributor sales increased some 250% during the war, the number of new distributors increased by less than 10%—in spite of the fact that related types of distributors, facing extinction for lack of merchandise, tried desperately to get over into the field where brisk sales and high priorities beckoned.

The present crop of industrial distributors is braced for a letting down of these bars. They hold the advantage of previous experience in rendering their specialized kind of service and are attempting to meet new competition with improved selling methods.

We are pleased to announce that
HARRISON A. RODDICK
Marketing Consultant

and
ALF E. WEROLIN
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both of whom have a long association with the firm,
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It's true! Cardineer is a definite war or peace aid. It's compact—up to 15,000 cards within the convenient reach of the operator. It's portable—roll it anywhere you wish. It's inexpensive—within a year its saving pays its total cost. It's trim—tones up any office. But best of all, Cardineer gives you better housing of records while saving 40% in operator personnel. Thus, it releases men and women for

other vital work. Once the days of peace are here, economy of operation may well prove the difference between gain or loss. Get cost conscious, *now*. The time is here to enjoy Cardineer and to set the stage for postwar conditions. Four models to choose from. Easily adapted to any recordkeeping needs.

Phone or write for details.

DIEBOLD, INCORPORATED
CANTON 2, OHIO

Offices and Dealers in All Principal Cities

① **REVELDEX ROTARY REFERENCE FILE, No. 73-05.** Two or more records can be exposed at same time.

② **Cardineer DESK MODEL, 72-70.** Revolves in a horizontal plane. 2500 cards. Compact. Efficient.

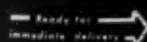
③ **Cardineer MASTER MODEL, 72-58.** Holds 6000 cards. Occupies less than 4 square feet.

④ **Cardineer SENIOR MODEL, 72-45.** A new model with a surprisingly large capacity.



DIEBOLD

Systems to Fit the Routine



TRA-DEX
VERTICAL VISIBLE FILES

FLEX-SITE
VISIBLE BOOK

Available when victory comes—Sales: Money Chests, Electric Record-Desk Safes, Bank Vaults, Office Accessories

Cardineer
ROTARY FILES

NEW PRODUCTS

Surface Inspector

"Faxfilm" is the registered trademark of an ingenious process for inspecting surfaces and establishing quality control—the recent invention of Rex D. McDill, engineer and physicist, 5109 Mayfield Rd., Cleveland 21. A standard kit for putting the process to work consists of a roll of transparent plastic film adequate for 250 inspections, 250 cardboard frames of a size to fit into practically any standard slide projector or into a J.&L. Comparator, a bottle of solvent, and a pencil-like moistener.

Application requires seven quick steps: (1) Moisten inner gummed surfaces of a frame; (2) cut an inch of film from roll; (3) wet surface of subject to be inspected with solvent; (4) press film firmly into surface; (5) leave for 30 to 60 seconds; (6) peel film from specimen; (7) insert and seal film in moistened gummed frame. Result is a three-dimensional facsimile of the surface in reverse, with hills where there are valleys and vice versa, whatever the specimen may be—machined metal surface, sanded oak block, galvanized sheet steel, linen cloth, epsom salt crystals, ground metal surfaces. Cracks and other surface defects show up readily. Faxfilm is said to be "distinct" and to "show details of the finest irregularities up to 0.0001 in." under magnifications up to 100 diameters.

Automatic Ventilator

Because the new Automatic Window Ventilator shows promise of becoming



an efficient fuel saver, WPB has just allocated materials to the Automatic Window Ventilator Co., 1713 N. Water St., Milwaukee 2, for its immediate production. Purpose of the plastic and aluminum device is to protect sleepers and others with penchants for open windows against quick and chilling temperature drops.

You adjust a lockable knob on a coiled thermostat (left) to the temperature desired in a room and raise the window. All through the night, or

day for that matter, a transparent plastic vane will open and shut automatically and noiselessly as the inside temperature goes up and down.

F-Lamp Changer

Stepladders will be released for other services by the new C-B Fluorescent Lamp Changer if its manufacturer, the C-B Tool Co., 2944 Wabank Rd., Lancaster, Pa., has its way. The device consists of a long handle (to which extensions can be added as the height of lighting installations may require), a pair of jaws in its upper end for grasping a defective fluorescent tube, and an operating crank on the lower end. The jaws take hold, a twist of the crank releases the tube's connecting pins from

THINGS TO COME

Flashlights of the future will have new phosphorescent cases to make them easy to locate in the dark when room lights go out suddenly and you have to visit the fuse box in the back hall or basement. Luminescent pigments will be mixed with plastics prior to molding and will thus be integral with the cases. Only foreseeable drawback will be their inability to glow in the dark after long repose in a dark drawer. All phosphorescent pigments must be excited by light for a few minutes to provide several hours of afterglow, hence the new flashlights will have to be stowed in light places between emergencies.

Vacuum conveying promises to handle peacetime materials in industry with the same dustless efficiency of vacuum cleaning in the home. Foundry sand, food products ranging from dried beans to breakfast cereals, chips from machine tools, ores, fly ash, whatever, will be sucked through permanent piping, propelled by the onrush of atmospheric air. Portable vacuum conveyors, large as fire trucks or smaller than jeeps, will move up to freight cars or cargo ships to withdraw their contents expeditiously and atmospherically. Equipment both permanent and portable can be made to double as industrial vacuum cleaners during intermissions between conveying assignments.

their sockets, and you lower away without ever leaving the floor. Reversing the process, roughly speaking, installs a fresh F-lamp.

Storage-Battery Welders

Two versatile new items of welding equipment were exhibited for the first time this week at the National Metal Show by the Progressive Welder Co., 3050 E. Outer Drive, Detroit 12: (1) the Heavy-Duty Storage-Battery-Powered Resistance Welder (below); (2) the



"Economy" Spot Welder, similarly powered and of the rocker arm type (not illustrated). Both types can be installed almost anywhere because the batteries can be kept charged either from the wires of a local utility or by an engine-powered generator. Since power is used only for brief periods during actual welding, the total power demand is said to be "only 1/4 that of conventional stored energy welders and 1/20 that of arc welders."

Batteries are specially designed to withstand extremely high discharge rates. Those for the heavy-duty machine are housed in one or two large "power pack" units (left), the number depending upon the character of a given job. Since the economy machine is a self-contained unit, batteries are housed in its base.

Operation of the latter is from normal factory air-line pressure. Standard depth of throat is 24 in., with other depths available. Rated capacity is two pieces of 14-gage mild steel or two thicknesses of 0.040-in. aluminum. Capacity of the heavy-duty welder, set for spot welding, is two sections of 3/16-in. aluminum, or welding equivalent of other metal. Set up for roll welding, illustrated, its capacity is two pieces of 1/2-in. aluminum at speeds up to 50 ft. a minute. In both machines, electrodes for spot or roll welding can be cooled by water or by mechanical refrigeration.

ALUMINUM for new designs



Many of the new products that will emerge from drafting boards in the after-war era will call for the use of aluminum. For aluminum alloys, combining lightness with utmost strength, will present advantages not possible with heavier metals.

Aluminum Refiners—producing accurate analysis alloy ingot in volume—will be ready to serve you. In fact, we can right now, help to supply your requirements for aluminum alloys. We will be glad to discuss the matter with you.

Aluminum Refiners

Division of BOHN ALUMINUM AND BRASS CORPORATION
General Offices: Lafayette Building, Detroit 26, Michigan



MANUFACTURERS OF ALL TYPES AND SHAPES OF CASTINGS AND DEOXYGENING ALLOYS

Utilities in Demand

Cities actively interested in acquiring power facilities affected by SEC interpretation of holding company law.

As steps continue toward breaking up the nation's giant utility systems to meet the Securities & Exchange Commission's interpretation of the utility holding company law, more and more cities are seizing the opportunities thus presented for acquiring the privately owned electric light and power properties now serving them.

● **Cincinnati Interested**—Cincinnati, for example, let it be known at the SEC's recent hearing on the Columbia Gas & Electric system's integration problems that it is actively interested in acquiring the \$135,000,000 Cincinnati Gas & Electric facilities serving the community. Columbia Gas has agreed to dispose of the company to meet SEC requirements.

Covington, Ky., at the same time, indicated that it was considering purchase of a smaller Columbia Gas subsidiary, Union Light, Heat & Power Co., which also will be cast adrift.

● **South Carolina Bids**—South Carolina's capital, Columbia, is another city now busy on plans aimed at changing a privately operated electric system into a municipally owned property.

Columbia has opened negotiations to buy the South Carolina Electric & Gas Co. which serves the city and its environs. The property has been on the market ever since the SEC some time ago ordered the parent (General Gas & Electric Co., an Associated Gas & Electric system subholding unit) to divest itself of the company.

Columbia is reported to have entered a tentative bid of \$39,500,000 for the company, which recently valued its assets at almost \$58,000,000 and reported earnings of \$1,109,000 available for dividends in the year ended June 30, 1944. The city figures that this offer would mean a price of around \$13,500,000 for the parent's common stock holdings after paying off funded debt, and other stockholders. Columbians will soon be asked to vote approval of the deal although many problems must be ironed out before the transaction can be completed.

● **Deal in Indiana**—Citizens of Fort Wayne, Ind., will vote next month on

purchasing the Indiana Service Co. which now supplies the city with electricity and traction services. This deal (with trustees of the bankrupt parent concern, Midland Utilities Co.) has been under way for months. And Fort Wayne is said to have offered \$13,000,000 for all of the company's assets except \$3,500,000 of cash and intangibles.

However, the company, which has \$12,000,000 of funded debt, considers a price of \$13,000,000 to be inadequate. Therefore, even if voters approve the purchase, completion of the deal may still require prolonged negotiations.

● **Option in Missouri**—Federal Light & Traction, a subholding unit in the Cities Service Co.-controlled Cities Service Power & Light group which is well on its way toward meeting SEC integration requirements, has just given Springfield, Mo., an option to buy its Springfield

Gas & Electric Co. for \$6,750,000. The price offered may be acceptable, since the best earlier outside bid would have netted Federal only \$650,000 for its interest in the Springfield property.

An actual sale, however, awaits the clearing away of the legal questions on whether a referendum vote is necessary and whether an ordinance must be adopted to authorize the sale of special revenue bonds.

● **Tucson in Market**—Tucson, Ariz., has recently offered \$9,000,000 for a Federal Light & Traction property—the Tucson Gas, Electric Light & Power Co.—subject to approval of Tucson voters and certain adjustments yet to be agreed to by the parent company.

A spread in municipal ownership to Omaha, also, appears in the wind. There is agitation in Omaha for public ownership of the \$44,000,000 Nebraska Power Co. property (BW—Oct. 14'44, p18).

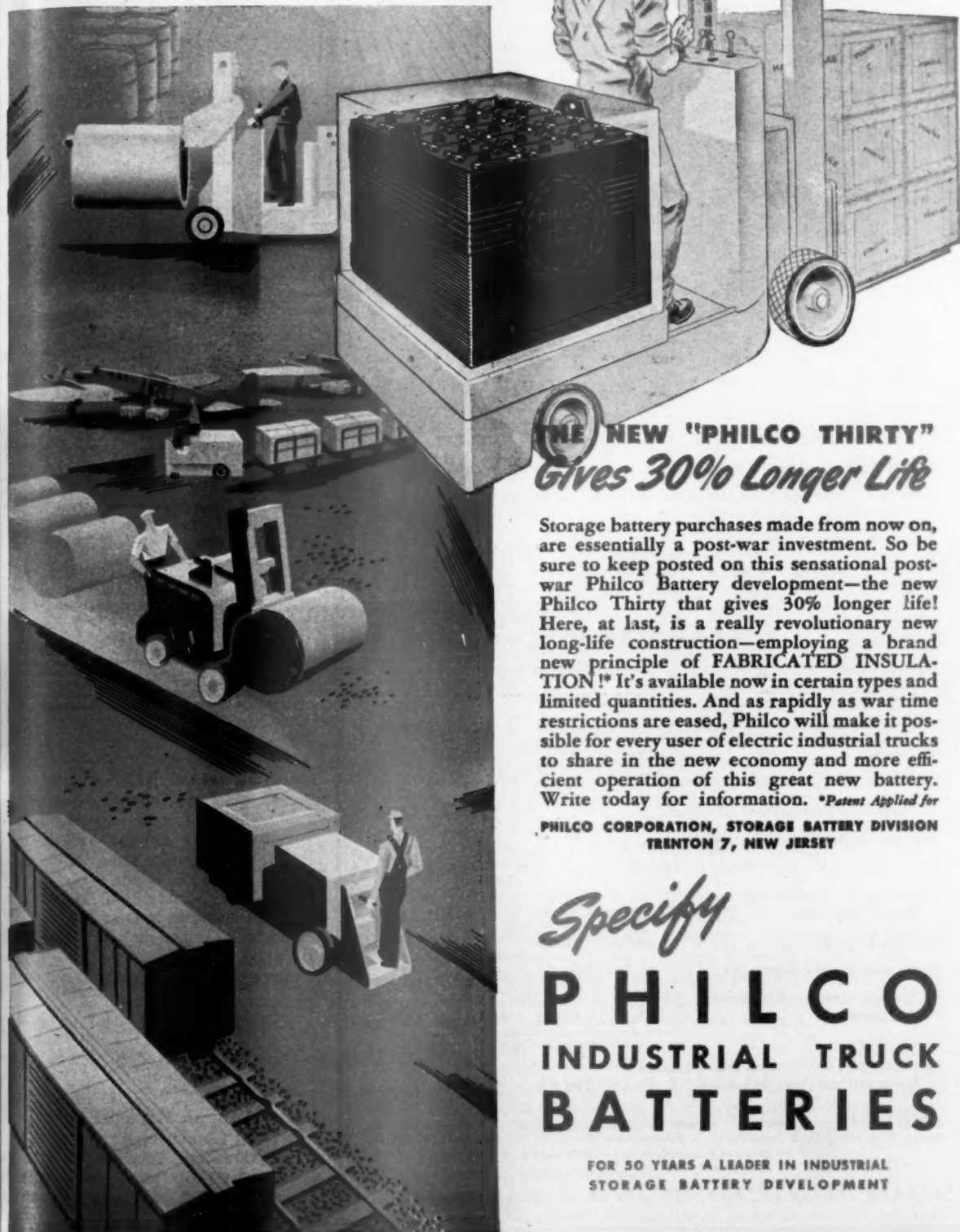
● **Louisville Snagged**—The recent move of Louisville authorities to purchase the \$94,000,000 Louisville Gas & Electric system (BW—Jul. 8'44, p57) appears to have hit a few snags. Standard Gas &

FOR EAST OR WEST

A timesaver in speeding military supplies east and west is the new \$1,300,000 freight yard (below) at Lincoln, Neb. Classification and dispatching facilities of the Burlington Lines' layout feature the latest in equipment, including train-to-office radio hook-ups (BW—Jul. 15'44, p73). From the tower (right), operators manipulate the remote switches and car retarders which control cars over the hump to 36 makeup tracks. A 100-car train can thus be humped in only 25 minutes.



PHILCO IS READY TO REDUCE YOUR POST-WAR BATTERY COSTS



THE NEW "PHILCO THIRTY" *Gives 30% Longer Life*

Storage battery purchases made from now on, are essentially a post-war investment. So be sure to keep posted on this sensational post-war Philco Battery development—the new Philco Thirty that gives 30% longer life! Here, at last, is a really revolutionary new long-life construction—employing a brand new principle of FABRICATED INSULATION! It's available now in certain types and limited quantities. And as rapidly as war time restrictions are eased, Philco will make it possible for every user of electric industrial trucks to share in the new economy and more efficient operation of this great new battery. Write today for information. *Patent Applied for

PHILCO CORPORATION, STORAGE BATTERY DIVISION
TRENTON 7, NEW JERSEY

Specify

PHILCO

INDUSTRIAL TRUCK BATTERIES

FOR 50 YEARS A LEADER IN INDUSTRIAL
STORAGE BATTERY DEVELOPMENT

THE NATIONAL CITY BANK OF CLEVELAND



Statement of Condition

SEPTEMBER 30, 1944

ASSETS

Cash and Due from Banks	\$ 98,159,775.23
United States Government Obligations	247,482,143.00
Other Securities	8,981,779.40
Loans and Discounts	80,249,441.18
Investment in Banking Premises	1,650,000.00
Customers' Liability on Acceptances and Letters of Credit	918,152.08
Accrued Interest	991,371.18
Other Assets	293,307.11
	<u>\$438,725,969.18</u>

LIABILITIES

Capital Stock	\$ 9,000,000.00
Surplus	9,000,000.00
Undivided Profits	2,180,832.03
Reserves	3,055,285.34
Dividend on Capital Stock payable Nov. 1, 1944	196,875.00
Acceptances and Letters of Credit	918,152.08
Accrued Interest and Expenses	651,463.16
Deferred Credits and Other Liabilities	534,115.74
Corporation, Individual and Bank Deposits	\$292,350,314.62
Savings Deposits	39,767,728.29
Trust and Public Deposits	18,760,560.62
U. S. Government War Loan Account	62,310,642.30
	<u>413,189,245.83</u>
	<u>\$438,725,969.18</u>
Contingent Liability on unused loan commitments to customers	\$ 41,157,285.61

NOTE: United States Government obligations carried at \$83,704,008.28 are pledged to secure trust and public deposits, U. S. Government War Loan account, and for other purposes as required or permitted by law.

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

Electric says the city's bid of \$83,000,000 for the property is too low. Standard Gas wants, instead, a price of \$25 a share for the common stock, all of which it holds, which means an overall price of close to \$87,000,000.

• **Finance Methods**—Thus far most of the 3,000-odd municipalities in the United States which own their own public utility services have been able to acquire the facilities without pledging the city's faith and credit, and without using city funds. The cash has been mainly acquired by issuance of so-called "revenue" bonds, either by the city itself or by an "authority" created to buy and operate the municipally owned utility.

Municipal revenue bonds are generally backed solely by pledged revenues of the utility, and not by a mortgage. The bonds are usually issued in serial form, enabling their retirement gradually out of yearly earnings.

Like all municipal issues, interest from revenue bonds is exempt from federal taxation and lately such obligations have been in great demand because of cheap-money conditions, high tax rates, and the diminishing floating supply of tax-exempt issues.

• **Chattanooga's Claims**—Some cities have operated their utility properties on a satisfactory basis and Chattanooga's electric power board, the city "authority" which has operated (with Tennessee Valley Authority power) the former Tennessee Electric Power Co. in Chattanooga since 1939, claims to have saved Chattanooga consumers (based on the 1938 rates of the privately owned company) some \$13,114,000 in their bills for service in five years, including \$3,157,000 in the 1944 fiscal year recently completed.

Since 1939, moreover, the city-owned utility has paid city and county taxing authorities \$1,398,000 and redeemed, or has funds available to redeem when due, some \$1,500,000 of the \$13,200,000 of revenue bonds originally issued to pay for the property. The utility has refunded some \$6,000,000 of 2½% and 2¼% bonds issued in 1939 with new 2s, 1½s, and 1¼s at a net annual saving in interest of about \$27,000.

UPTREND IN DIVIDENDS

Publicly reported cash dividends last month jumped to \$372,300,000, or 7% above September, 1943, levels, and in the first nine months of 1944 were \$2,486,300,000, or 2.5% more than in 1943's January-September period, the Dept. of Commerce has reported.

Stockholders benefiting most this year have been those owning auto-shares, for dividends on this group ran

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A Contour Projector magnifies gear with accuracy to .0001"



B&L Range finders enable U. S. Navy gunners to hit a ship 17 miles away



Precision aerial camera photographs enemy territory with B&L lenses



Bomber navigators use B&L Sextant to plot course by sun, moon, stars



Multiplex Projector plots topographic maps from aerial photos



Perimeter, one of many B&L vision testing instruments in military use



B-29 fliers, too, wear B&L Ray-Ban anti-glare glasses on Tokyo air raids



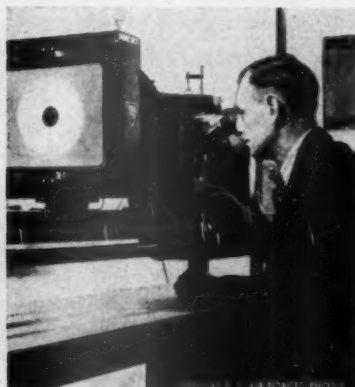
Coast Guard officer on convoy duty scans horizon with B&L Binocular



Medical Corps uses B&L Microscopes



B&L Spectrograph for metal analysis



B&L Research Metallographic Outfit



The B&L Anti-aircraft Height Finder

Here Are the Eyes of Victory



Allied might is rolling up a smashing record of individual victories that point to ever-more-imminent total victory.

The way in which American industry supports its fighting men is astounding our allies and confounding our enemies. In the production of war materiel, industry and science have cooperated to make our hard-hitting forces the most completely equipped in the field.

Optical science has made and is making its contribution to this production record.

In fire-control—in aerial reconnaissance—in improving the vision of fighting men and production workers—in inspection instruments that make possible the precision our weapons demand—optical science provides the "Eyes of Victory."

Because Bausch & Lomb was prepared with manufacturing facilities (including its own optical glass plant) and a personnel trained and experienced in optical science, an otherwise certain shortage in vital optical equipment was averted.

As long as American men are fighting,

Bausch & Lomb will continue to center its efforts on military needs. After that, Bausch & Lomb knowledge and capacity will again be devoted to making life better through optical science, optical instruments and optical methods.

BAUSCH & LOMB

OPTICAL CO., ROCHESTER, N. Y.

Est. 1853



Makers of Optical Glass and a Complete Line of Optical Instruments for Military Use, Education, Research, Industry and Eyesight Correction and Conservation

BYRON WESTON CO. LINEN RECORD, EXTRA NO. 1 100%
 DEFANCE LEDGER 100% WARELY LEDGER 75% CENTENNIAL LEDGER 75% WINCHESTER LEDGER 50% BLACKSTONE LEDGER 25% WESTON'S BOND EXTRA NO. 1 100% DEFANCE BOND 100% HOLMESDALE BOND 75% WINCHESTER BOND 50% BLACKSTONE BOND 25%
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PROJECTILES

as well as

PROJECTS



are launched with

WESTON PAPER

Among the deadliest of new developments for the destruction of our enemies is the rocket or "Bazooka" projectile, launched not only from our warplanes but from tanks, PT boats, landing craft and the like. The launching tubes for the "Aerial Bazookas" called for a material combining lightweight with extraordinary strength, flexibility, resilience and endurance. Such a material is being produced by the General Electric Company Plastics Divisions manufactured from a special absorbent 100 per cent cotton fibre paper which has proven ideal for the purpose. The paper was developed in the Weston laboratory and made in the Weston mills.

A far cry, perhaps, from the WESTON papers on which many a post-war project will be launched—many a vital record, document and communication presented and preserved. But out of our experience in the development and production of papers for this and many other critical war uses will come papers more than ever justifying the recommendation that your supplier has been making for many years

If it's worth keeping, keep it on a WESTON Paper

BYRON WESTON COMPANY
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Makers of PAPERS for BUSINESS RECORDS

EVERY WESTON PAPER IS A COTTON FIBRE CONTENT PAPER

28.9% above comparable 1943 levels. Oil refining companies, even though their stocks have been loggy for some time, were 15.3% more generous to stockholders.

This year investors in the chemical industry have tucked away 7.5% higher dividends, and owners of food, tobacco, and beverage shares have experienced a rise of 5.4% in dividend receipts.

The electric power and light industry has cut its dividends 4% under 1943 levels and minor declines were seen in disbursements to holders of shares of the mining, textile and leather, iron and steel, and finance companies.

Claims Disputed

Settlement of hurricane damages results in charges of quibbling. Use of binders also causes complications.

Damage caused by last month's East Coast hurricane, it is estimated, will eventually cost insurance underwriters some \$15,000,000 on some 50,000-odd claims. However, the whole situation hasn't been cleaned up as yet and is still causing some reverberations.

● **Reports Complaints**—Gov. Walter Edge of storm-battered New Jersey has publicly stated that he doesn't like the attitude of some companies in settling of claims in his state.

He recently reported "considerable dissatisfaction" among property owners who paid premiums for years in the belief that their property was protected only to be confronted with technical quibbling as to what constituted a tidal wave or hurricane and whether damage was caused by winds, water, or a combination of both.

● **Charge Called Unfair**—Insurance executives don't think his charge a fair one and a number report going "beyond our responsibility" in settling claims.

Much of the trouble is attributed to the fact that few holders ever thoroughly read their policies, are not aware of exactly what storm damage they are protected against, or that straight wind storm and extended coverage indorsement policies, for example, do not cover any losses, direct or indirect, "caused by water or rain, whether driven by wind or not."

Complicating the situation are the many binders covering risks in the storm area that company agents wrote in the short time that elapsed between receipt of official storm warnings and the hurricane's arrival.

● **Prohibited in Some Areas**—The method of increasing sales of storm damage

age insurance was formerly used by agents in Florida and along the Gulf Coast but finally was prohibited by insurance companies in those areas.

Trade circles expect repercussions in East Coast cases where binders were written shortly before the recent hurricane hit. However, power to issue binders is given to agents in their contracts and can only be removed with their approval.

LINK STRENGTHENED

The close relationship between Canadian Breweries, Ltd., and the Brewing Corp. of America of Cleveland was bound tighter recently by a further exchange of stock and reciprocal interlocking of executive positions.

Canadian Breweries provided technical and production assistance at the birth of the Cleveland corporation in 1933, and sold exclusive U. S. rights to its Carling's Red Cap ale and Black Label beer to the new concern (BW—Apr. 15 '44, p106).

Recently the Canadian company made a substantial addition to its investment in Brewing Corp., and J. A. Bohannon of Cleveland, president of the American brewery, was elected to the executive committee of Canadian Breweries. E. P. Taylor, president of Canadian Breweries, was made chairman of the finance committee of Brewing Corp.

Officials of Brewing Corp. said the latest transaction was unrelated to recent reports that the company might seek additional capital for contemplated further expansion (BW—Jul. 15 '44, p48). They said it signified only closer tying of a relationship "mutually profitable and satisfactory."

BANK PLANS PLANE LOANS

The Morris Plan Bank of New York anticipates considerable financing of civilian purchases of surplus airplanes after the war and is preparing to go after this new type of business.

It has established a special department which has just completed its first transaction—financing the purchase of a former government-owned training plane by an Army officer who, strangely enough, is not an Air Corps member.

This isn't the first time that the bank has financed the purchase of a plane. However, before the war such loans were few and far between and were handled by its automobile finance division.

Thus far the department is reported to have set up no fixed requirements with respect to down payments or financing terms. Each transaction will be handled on its own merits, and it is expected that borrowers will be given twelve to 18 months for repayment.

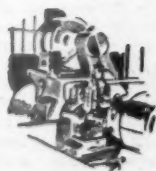


**MANY COMPANIES NOW
ARRANGING FOR
RECONVERSION CASH**

**Risking No Possible Delay In
Changing Over Quickly For
Civilian Production**

Looking ahead to a constant succession of war contract terminations, and to further easing of controls on production for civilian use, more and more companies are taking steps to reconversion.

Let us set aside Now
All the Cash you may need



To Finance All Equipment New or Used

We will finance all your purchases of new or used machinery and equipment from manufacturers or the Government, under one uniform, low-cost plan with payments over a period of years. Details on request.

YOU CAN arrange immediately to have all the outside cash you may need in changing over your business for peacetime operation . . . and in carrying it through to self-supporting profit. Moreover, you can make this foresighted arrangement under a simple, flexible plan which involves no interference with your management . . . places no restrictions on your operation.

This service lets you carry forward your reconversion program under your own control . . . with a known supply of cash ready to use when you need it. It eliminates the possibility that any delay in turning wartime assets into cash can hold you back in the race for civilian markets.

Take the first step now. Write, wire or telephone the nearest office listed below and let us give you full information.

Commercial Credit Company

BALTIMORE 2, MARYLAND

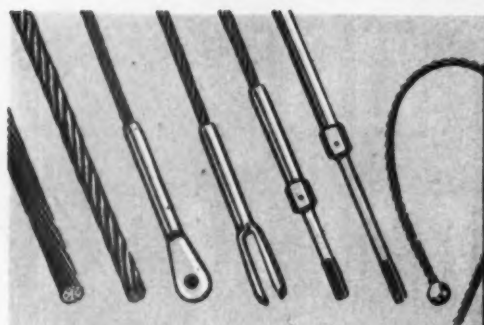
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Capital and Surplus More Than \$65,000,000

INSTALLMENT FINANCING OFFICES IN PRINCIPAL CITIES OF UNITED STATES AND CANADA

TAKE ONE *or all* four answers



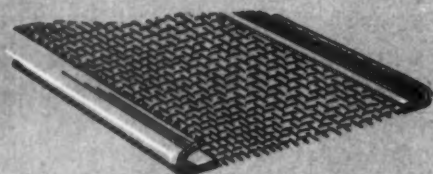
THE PROBLEM OF EQUIPMENT CONTROL

You may learn a lesson from a bomber if you can adapt steel-strong, silky-flexible cord of the type Roebling makes for aircraft controls to your own equipment. It transmits motion, accurately, efficiently . . . and it endures. Complete assemblies with swaged terminals available for reasonably prompt delivery.



THE PROBLEM OF EMERGENCY POWER

Here's a safe, easy way to extend electrical distribution circuits—Roebling Parkway Cable laid directly in a shallow trench. Eliminates time and expense of conduits, manholes, poles, etc. for lighting, signal and fire alarm circuits.



THE PROBLEM OF PRODUCT GRADING

Coal mines are swinging to the use of these bound-edge woven-wire screens for accurate grading. Roebling gives them the specialized steel that can take it in any grading operation, and the know-how that weaves and binds them right. Can such screens be tailor-made to your use?



THE PROBLEM OF ABSORBING SHOCK

Many a coil spring gets its start from a roll of Roebling Tempered and Blued Round Wire, made to hit "specs" on the nose for dimensions, steel analysis, temper and finish. This division also makes flat and shaped wires, strip steel . . .

JOHN A. ROEBLING'S SONS COMPANY • TRENTON 2, NEW JERSEY
Branches and Warehouses in Principal Cities



ROEBLING

PACEMAKER IN WIRE PRODUCTS

WIRE ROPE AND STRAND • FITTINGS • AERIAL WIRE ROPE SYSTEMS • COLD ROLLED STRIP • HIGH AND LOW CARBON ACID AND BASIC OPEN HEARTH STEELS • ROUND AND SHAPED WIRE • ELECTRICAL WIRES AND CABLES • WIRE CLOTH AND NETTING AIRCORD, SWAGED TERMINALS AND ASSEMBLIES • SUSPENSION BRIDGES AND CABLES

WAR BUSINESS CHECKLIST

A digest of new federal regulations affecting priorities, price control, and transportation.

Increased Civilian Supply

Civilian items for which WPB recently released a supplemental allotment of steel (BW—Oct. 14 '44, p. 7) include all domestic cooking and heating stoves; warm air furnaces and warm air distribution equipment; oil and gas floor and wall furnaces; underfired gas water heaters; range boilers; low pressure steam and hot water heating specialties; combustion, heat generation, and distribution controls; hot water storage tanks. Interested manufacturers should file supplemental CMP 4B applications with WPB's Plumbing & Heating Division, together with Form WPB-3820 covering information on the labor supply.

• **Stokers and Oil Burners**—Implementing action taken recently to authorize production of 37,500 domestic-type stokers (BW—Sep. 23 '44, p. 56) and of 30,000 domestic-type oil burners (BW—Sep. 30 '44, p. 83), WPB is now receiving, through its field offices, manufacturers' applications for permission to produce these items. Stoker installation is controlled by Order L-41. Sales of oil burners for new installation require approval by OPA or Petroleum Administration for War; sales to replace equipment that is worn out or damaged beyond repair are restriction-free.

• **Guns and Rifles**—WPB has authorized nine manufacturers to make 495,000 new shotguns and rifles and to complete a quantity of partially fabricated guns for replacing essential civilian equipment, including weapons for the police, farmers, and ranchers. The Office of Civilian Requirements regards this as a step toward partial reconversion of the industry. If any of the manufacturers have manpower and facilities for a larger production program, they may apply to WPB under PR 25, the spot authorization plan, for additional materials.

• **Steel and Lumber**—At the request of the American Red Cross, OCR has released 400 tons of steel and nearly 15,000,000 ft. of lumber to repair damage caused by the East Coast hurricane.

Decreased Civilian Supply

Though the quantity of dried fruits—principally raisins and prunes—to be channelled to civilian use from the 1944 pack is slightly smaller than last year's (318,600 tons, as compared with 352,800 tons), War Food Administration has taken action to release the fruits to the markets much earlier than was possible last year.

Relaxed Restrictions

General Preference Order E-1-b is amended to eliminate ratings on purchase orders of machine tools and to permit

unrated orders to share in the 25% of total production allotted for nonmilitary use. Rated orders will still be delivered first.

• **Gage and Precision Measuring Hand Tools**—By discontinuing Form 547, WPB allows suppliers to purchase the tools without ratings. (Order E-5-a, revoked.)

• **New Furniture Patterns**—These may be developed and sold without specific WPB authorization provided that each manufacturer limits himself at any one time to 25% of the patterns he had in September, 1941, or to 24 patterns, whichever is greater. (Order L-260-a, as amended.)

• **Dichlorethyl Ether**—WPB has revoked Order M-226, governing allocations of this chemical, since the supply available to synthetic rubber exceeds requirements.

• **Printing Plates**—The amount of copper available for these has been increased from 60% to 75%, by weight, of the copper used in the corresponding quarter of 1940, by an amendment to WPB Order M-339. Anyone may use 100 lb. in any calendar quarter. Though the amount of zinc available has not been increased, platemakers no longer need preference ratings to buy zinc. Order M-99, requiring the scrapping of obsolete plates, has been revoked.

• **Safety Equipment**—Unrestricted use of copper-base alloys and other metals is permitted through revocation of WPB Order L-114, covering such items as guards, goggles, shields, headgear, resuscitating apparatus, and other specified equipment.

• **Metal Signs**—Iron and steel in frozen, idle, or excess inventories, as well as aluminum and magnesium, may be used in making these items, production of which has previously been prohibited. Manufacturers may apply for permission under the spot authorization plan to use other metals. (WPB Order L-29, as amended.)

• **Metal License Plates**—The production of plates, including dog licenses, bicycle tags, and automobile licenses, issued by state or other local governments, is freed from controls by WPB's action revoking Orders L-32, L-32-a, and L-32-b.

• **Barley**—Restrictions on types that can be sold for malting purposes have been removed by OPA in Amendment 2, Supplement 3, Food Products Regulation 2.

• **Goat and Sheep Skins**—Importers may obtain permits to bring in semitanned skins from Iran, Iraq, and Syria, regardless of whether the applicants were previously in the business. The skins are still subject to General Imports Order M-63, however.

Tightened Restrictions

ODT has prohibited the use, except by permit, of tank cars of less than 7,000-gal. capacity for rail shipment of petroleum products to the Atlantic seaboard (PAW District 1) and of all liquid products to the Pacific Coast. (Special Direction ODT 7, Revised 3.)

• **Canner and Cutter Beef**—In a set-aside order similar to that issued last year (BW—Feb. 5 '44, p. 77), War Food Administration has ordered packers operating under federal inspection to reserve 80% of this beef for the government. They must also set aside 60% of choice, good, commercial, and utility grade beef meeting Army specifications. The estimated proportion of U. S.

THE JUNGLE SNEAK THAT SNAPPED OUR RUBBER SUPPLY...



...but showed you a way to
s-t-r-e-t-c-h your post-war profits!

1 When Jap conquests in East Asia robbed us of 90% of our crude rubber supply, America's synthetic rubber industry was in the pilot plant stage... with such limited output that the price of the synthetic product was in the neighborhood of 55c a pound.



2 Galvanized into action by the Jap jungle sneak, and by the vital U. S. military need for tires, the process industries—by pooling patents, brains, know-how—developed mass production techniques that skyrocketed tonnage "overnight", drove the price of synthetic rubber down to 15c a pound!



3 Too much was at stake to take chances on the control instruments for processes involving such exacting syntheses as rubber and its intermediates. That's why most plants handed over their toughest problems of temperature, pressure and flow control to Foxboro!

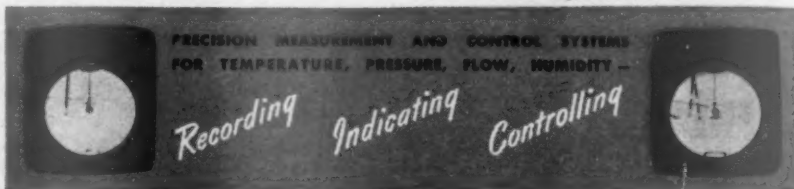


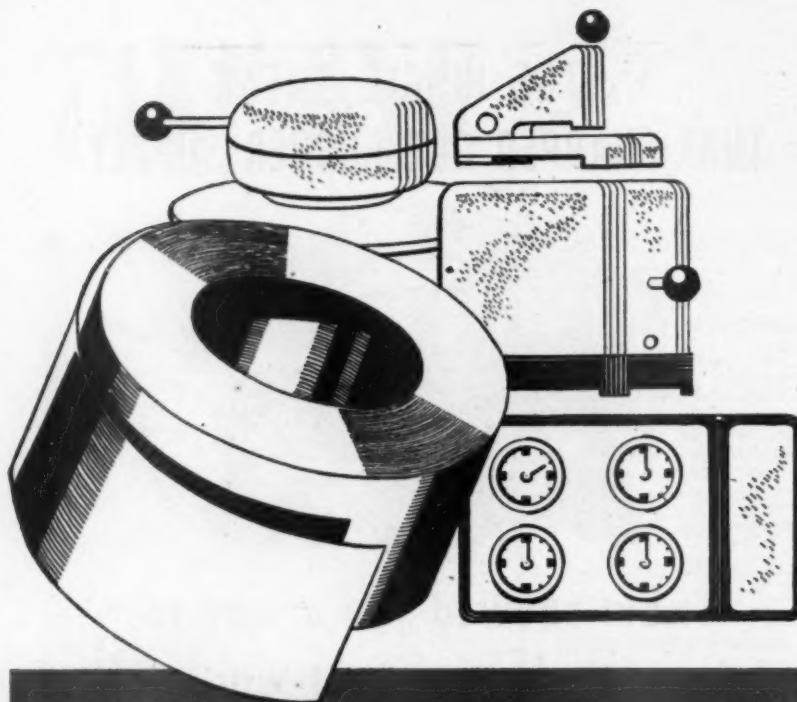
WHILE SPECTACULAR, the cost-cutting, tonnage-boosting job that Foxboro Instrumentation has helped the synthetic rubber industry do is not unique. In scores of other industries... food, paper, textiles, and petroleum, to mention just a few... Foxboro Instruments have helped effect production gains and economies that match anything they've done for synthetic rubber.

As step No. 1 toward starting

your plant toward the top in the postwar competition, consider using Foxboro Instrumentation wherever processing involves critical temperature, pressure, or flow. No reason why it can't effect similarly beneficial results for you! The Foxboro Company, 120 Neponset Avenue, Foxboro, Mass., U. S. A.

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POLISHED BLUE SHEETS • ELECTRICAL SHEETS & STRIP • SEAMLESS TERNE ROLL ROOFING

beef going to military forces and war agencies is 30% of total output. (Amendment 15, WFP 75.2.)

• **Bottle Caps and Crowns**—To channel tin to vital uses, WPB has ruled that salvaged cans may not be used to make bottle caps and crowns, since additional quantities of black metal have been released to crown manufacturers. Until Jan. 1, 1945, producers may use material now in their possession. (Direction 1, Order M-325.)

Price Control Changes

If producers of synthetic resins that contain more than 50% of gum rosin cannot maintain production at present ceiling prices, they may apply to OPA for limited increases. (Amendment 5, Regulation 406.) This action follows a recent price increase for gum rosins of 24¢ per 100 lb., established for 13 grades sold on the Savannah (Ga.) Cotton & Naval Stores Exchange, and for gum rosin sold off the exchange. (Amendment 1, Regulation 561.)

• **Textile Bobbins and Spools**—Manufacturers of types made chiefly of wood may raise their present maximum prices as much as 14% above their Oct. 1, 1941, level. (Amendment 127, OPA Regulation 136.)

• **Monohydrated Copper Sulphate**—This chemical, a basic ingredient in fungicides for certain food crops, has been given a new wholesale ceiling price for eastern output, which is 25¢ per cwt. higher than former ceilings, on sales in 200-lb. drums in lots of 36,000 lb. or more. The increase may be passed on to the consumer. (Amendment 5, OPA Regulation 354.)

• **Pianos**—An interim OPA measure for pricing pianos that manufacturers have been authorized to make allows a uniform 13% increase over existing ceiling prices pegged at the March, 1942, level.

• **Ethyl Alcohol and High Wines**—For ethyl alcohol—except that produced on the West Coast—the average margin per gal. over total costs allowed to producers of war alcohol for any calendar quarter after June 30, 1944, in which there is a whisky holiday is limited to the average margin in the prior quarter when production was entirely for government account. OPA will act to insure an equitable apportionment of costs as between war alcohol and beverage alcohol. OPA may adjust maximum prices on war alcohol when they appear excessive. (Amendment 9, Regulation 28; Amendment 9, Reg. 295; Amendment 6, Order 108 under Section 1499.3[b] of Gen. Max.)

• **Tapioca Flour**—OPA has established specific prices which importers may pay on flour bought from foreign sellers or their agents in producing countries. Markups already established by Maximum Import Price Regulation may be added for sales in this country. (Order 51, Max. Import Reg.)

Ration Control Changes

Through local rationing boards, OPA, rather than the Office of Defense Transportation, will handle applications by commercial motor vehicle operators for temporary and nonrecurring allotments of gasoline. ODT will continue to control applications for certificates of war necessity and permanent changes in allotments.

It hasn't come to this yet, but . . .



1.



2.



3.



4.



5.

No, it hasn't quite come to this at the Hotel Pennsylvania.

We try our best to accommodate guests who drop in unexpectedly, on the only basis that's fair and square for all—*first come, first served.*

The wise thing to do—and more travelers are doing it every day—is to make your Hotel Pennsylvania reservation well in advance. Far enough so that we can confirm it.



That's the first of what we call our "Three Golden Rules of Wartime Travel."

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Hotels today are operating under severe handicaps. Many more guests are being accommodated, with reduced personnel and a shortage of equipment.

In spite of these handicaps, you'll find that Hotel Pennsylvania service is being maintained at a remarkably high level . . .

You can still count on a comfortable room, with a famous Statler bed . . . delicious meals that are a triumph under rationing . . . the restful relaxation you need, even in these wartime days.



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Stencil-Marked addresses make for prompt delivery. That's why they're the required type of marking for all war shipments. Marsh-Stencil your shipments! Saves up to \$600 annually in shipping room costs! To use, simply cut a stencil, stroke with a Marsh Stencil Brush and your shipment is legibly, permanently addressed. Three sizes to meet Gov't Spec. 1", 3/4" and 1/2". Write now for booklet, prices.

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though OPA is empowered to reduce the allotment under specified conditions.

Contract Cancellations

Changing war needs have reduced schedules for steel landing mats by more than \$20,000,000. Though the cutbacks, which will be spread through a period ending next March, will affect 21 plants, a layoff of only 585 employees is looked for, since the plants generally have other war work.

Christmas Deliveries

Because transportation of Christmas gift packages in this country constitutes a major

wartime home-front problem, the Office of Defense Transportation is urging that all packages be put into the mail not later than Dec. 1. If Christmas mailing is delayed beyond that date, delivery by Dec. 25 cannot be assured.

Production Authorization

The War Production Board has authorized truck manufacturers to produce a total of 52,584 commercial trucks during the first half of 1945. Twenty-nine manufacturers will make 26,179 light-heavy trucks and 6,425 heavy-heavy trucks. In addition, seven manufacturers are authorized to produce 19,980 light trucks.

SAVING MYRTLE

Federal, state, and civic groups are campaigning to conserve the West Coast's comparatively rare stands of myrtle trees (below) for the novelty trades. Found mainly in a 100x30-mile area of Oregon and California, this evergreen species yields an easily worked hardwood noted for its varicolored grain. Producing veneers and eye-catching novelties ranging from buttons to furniture (right), fancy-grained myrtle logs are worth \$1,200 per 1,000 b.ft. among woodworkers. In structural and shipyard trades which have put the wood to undramatic wartime uses, its value sinks to around \$50. That's the reason for the big three-way conservation drive.



MARKETING

Postwar Sales

Dollar volume isn't likely to exceed current peak much. Analysis of income-sales gives starting point for forecasting.

In this third year of the war, retail sales once again are running at a new wartime high of 67 billion dollars, even though consumers are putting an unprecedented 24 billions of their income to taxes and a record 36 billions into savings.

Postwar dollar volume isn't apt to surpass that war peak much—even at full employment, even with plentiful supplies once more available. And for many years, the return to peace is sure to mean sales relapse.

Survey of 23 Fields—This much is clear from an analysis of the record for 23 fields of retailing, the results of which are summarized in the accompanying table (page 88) and illustrated

in detail in charts (below). As one would expect, sales of any line of goods down through the years are closely related to the income that consumers have to spend.

Worked out mathematically, this relationship shows for each case theoretical sales "norms" corresponding to current purchasing power. Actual wartime sales are apt to be abnormal—for a number of reasons—but only comparison of actual with "normal" sales can show how abnormal and what is apt to happen with a return to peacetime conditions.

• **One Exception**—Of course, sales of durable goods have fallen sharply below normal—most spectacularly in the case of automobiles—because of wartime production curtailment. Jewelry has been the one exception, for in that particular field, sales have kept up to anticipated "par."

More remarkable are the comparisons which show that women's apparel, drugs, and restaurant sales have run well in excess of expectable levels. (Though sales of general stores and of dry goods

stores also have roared far ahead of "trend," past relationships of these sales to income have never proved themselves too stable, and so the "norms" in these cases cannot be considered quite so reliable.)

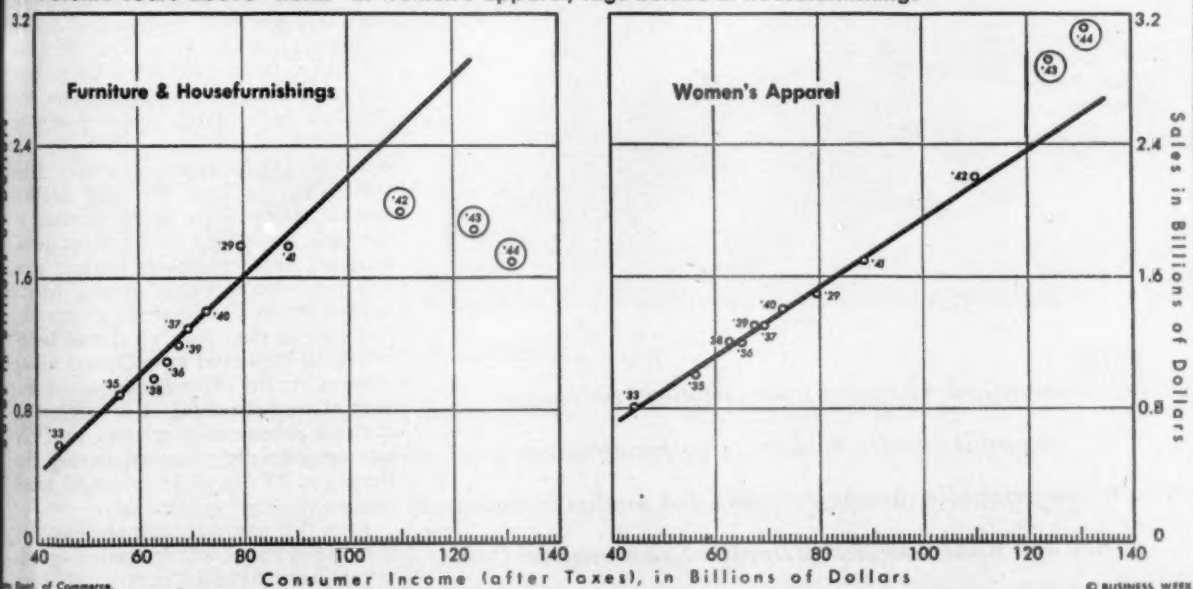
• **Food Sales Keep Pace**—Perhaps equally significant is the fact that grocery and other food sales have just about kept pace with their expected share of the consumer's dollar. Also, while filling stations and mail-order houses have been hard hit by shortages, the remaining retail lines selling nondurable goods—men's apparel, family apparel, shoe, department, variety, and a miscellany of other retail stores—have kept within 20%, and most of them within 10%, of their current norms, and have run 25% to 50% ahead of their sales in 1941.

The primary background for the war sales record is consumer purchasing power. Unsatisfied in some fields of severe shortages and tight price controls, it has to some extent "spilled over" into other lines—where supplies are plentiful or substitutes available, or where prices could be bid up, either directly or in such forms as "higher quality."

• **Trend of Dollar Volume**—Whether supply or price factors have been pri-

TYPICAL WARTIME CONTRASTS IN RETAIL SALES

Volume soars above "norm" in women's apparel, lags behind in housefurnishings



each point on these charts shows that income was and what sales were in one year. Until the war years, the points formed a pattern—a line of relationship between income and sales. This relationship can be computed

mathematically, and is shown as the straight line running through each chart. It expresses what would be the "normal" or "expectable" volume of sales at the current level of income, if peacetime conditions prevailed. Com-

parison of actual sales during the war with "normal" indicates approximately the abnormal effect of the war. And the "normal" line also permits calculation of expectable sales levels at any postwar income figure.



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demands equally modern cargo handling equip-
ment to minimize idle time in terminals. For savings in time,
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STRAIGHT—GAS POWERED INDUSTRIAL TRUCKS EXCLUSIVELY—SINCE 1919

marily important in any one case is an incidental matter when trying to gage the future trend of dollar volume, which is the retailer's key yardstick. Thus, taking women's apparel as an example, the important fact is that sales are 20% above norm and so are apt to drop after the war—whatever the impact on price lines.

Total retail sales, of course, have run 20% below the norm of current levels of income after taxes. But the overtime fever of the war economy will pass. Even with full employment, with increased output per man, and with a 1943 price level, postwar national income would not run much above 140 billion dollars. So even if taxes drop to around ten billions, consumers will have no more spending power than now—in which case, 1944 sales norms would apply approximately to the postwar economy.

• **On the Other Hand**—But national income may run lower—say around 120 billions—because prices may fall, output per man may not rise, or employment may fail to expand to the full. Postwar “norms” based on 110 billions of income after ten billions of taxes would lie about midway between actual 1941 sales and theoretical 1944 volume; at this level, total sales would be just slightly above the current wartime peak.

Thus, sales of furniture and home furnishings are as sure to rise from present levels as those of women's apparel are to fall. And, whereas grocery volume would hold up in a 140-billion economy, it would drop from the 1944 sales level in an 120-billion year (leaving aside the question of whether the drop would be taken up in prices or in actual food used).

• **Some Qualifications**—Postwar sales quotas figured from the past mathematical relationships, as summarized in the table, are subject to important qualifications, however. Sales income relationships don't remain fixed. Men's apparel during the thirties, for example, lost part of the share of the consumer's dollar it enjoyed in 1929; and filling stations, on the other hand, gained important markets. Still, it is interesting that the income-sales relation of 1929 was substantially preserved during the thirties in 14 out of 23 principal retail fields.

After this war, it is fairly obvious that automobile and other durable goods sales will outstrip their norms, until consumers' pentup wants are met; correspondingly, this means that other retail lines will at the same time fall below their “quotas.”

• **A Starting Point**—Although one cannot guess the extent of postwar shifts from prewar market relationships—or even, in every case, which lines will gain

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But not so generous to the operators of switchboards carrying an overload of calls inside the plant. Nor to executives who must telephone all over the plant to locate key men.

To compensate for this, man invented the sound system, available right now on priorities!

For getting attention—and for getting it *fast*—there's nothing to equal a sound system. It locates personnel in a flash—in the next room, the next

The advantage

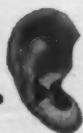
of having

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or lose—the significant fact is that such shifts have never been completely revolutionary in the past, hence, the “quotas” are a useful starting point for postwar sales forecasting.

One byproduct of the analyses is worth mentioning by itself. Obviously, some sales respond more sensitively to changes in income than do others. From the mathematical income-sales relations one can compute by what percentage auto or grocery sales, say, will rise or fall when income changes 1%. These percentages—which the economists term “elasticity of demand”—are different for every level of income, but consider as an example the 1929-1941 average,

which is about the 1939 income level. **• Jewelry Most Elastic**—The figures range from a 2% change for jewelry (the most elastic) to one of only 0.7% for variety stores (the most inelastic). Total retail sales change about 1.3% for a 1% change in income (from 1939 level). Autos, building materials and household appliances change about 1.7%, other durable goods a bit less. Among the nondurables, restaurant sales vary 1.5%, the various apparel groups about 1.2%, but filling stations and department stores only 0.9%, and grocery and drug stores only 0.8% for every 1% variation that occurs in income.

Retailing: Par Figures and Influences

When the United States has a disposable income of \$131,000,000,000 as the Dept. of Commerce has estimated for the year 1944, what would the volume of retail sales normally be, and how would that theoretical volume be divided among 23 principal lines of retailing? How do the estimated actual 1944 sales in each of these lines compare with the par figures—the theoretical levels computed by Business Week from equations worked out for each business (charts, page 85). In brief, what has

been the impact of the wartime conditions—comparatively—on the various retail fields?

The following figures tell the answers; and the theoretical levels also show what might be expected in a postwar year if there is full employment at 140 billion dollars of income and ten billions of taxes. In a year with 120 billions of income (and ten billions of taxes), the par figures for each line would be about halfway between the 1941 actual and the 1944 theoretical sales.

1944 SALES—ACTUAL VS. “NORMAL”

	1941 Actual	1944	
		Estimated	Theoretical†
Disposable income	88.7	131.0	131.0
Total retail sales	55.6	67.0	85.7
Durable goods	15.6	9.6	26.9
Motor vehicles	7.8	1.9	13.3
Auto parts and accessories	0.7	0.8	1.2
Building materials	2.4	2.3	4.4
Farm implements	0.5	0.4	0.8
Hardware	0.9	1.0	1.4
Furniture and house furnishings	1.8	1.7	3.1
Household appliances and radios	0.8	0.5	1.5
Jewelry	0.6	1.0	1.0
Nondurable goods	40.0	57.4	58.9
Men's clothing and furnishings	1.1	1.5	1.7*
Women's apparel, and accessories ..	1.7	3.1	2.6
Family and other apparel	0.6	0.9	1.0
Shoes	0.8	1.0	1.2
Drug stores	1.9	3.0	2.7
Eating and drinking places	4.8	9.1	8.2*
Grocery and combination	9.6	13.8	14.1*
Other food	3.0	4.2	4.2*
Filling stations	3.5	2.6	5.5*
Dept. stores	4.4	5.8	6.4
Gen. mdse. with food	1.0	1.4	0.7*
Other gen. mdse. and dry goods	0.7	1.2	0.8*
Variety	1.2	1.5	1.6
Mail order	0.6	0.5	1.0*
Other retail stores	5.2	7.9	8.4

* Relationships for these cases computed excluding 1929 data.

† Mathematical relationships in general are based on data for 1929, 1933, 1935-1941, inclusive.

Rough and Ready for Action

More than 400,000 GMC "Six by Six" Trucks for Our Armed Forces

There's nothing beautiful about this mud-splashed, war-worn Army truck. But *beauty is as beauty does*, and more of these 2½-ton, "six-by-six" GMCs are performing more duties for our Armed Forces than any other type of vehicle.

They go ashore with Army Engineers and Navy Seabees, helping to build bases and bridges and bomber strips on newly won territory. They are used by the Air Forces to transport bombs, gasoline and repair equipment. They serve as prime movers for the Artillery's 75 mm and 105 mm guns. They power machine shops for Ordnance and mobile radio stations for the Signal Corps. They transport complete surgical operating units and optical shops for the Medical Corps. They carry countless loads of food and fuel, munitions and materials for the Army Service Forces.

In fact, wherever and whenever Allied Armies need truck transport or truck power, you'll usually find another Army of GMC "six-by-six" trucks, *Rough and Ready for More Action.*



In addition to producing thousands of military trucks and amphibian "Ducks," GMC is now manufacturing several thousand commercial trucks for use in essential civilian occupations. If you are eligible for a new truck, see your GMC dealer first for "The Truck of Value." Remember, too, that your GMC dealer is headquarters for the original truck-saving, time-saving Preventive Maintenance Service.



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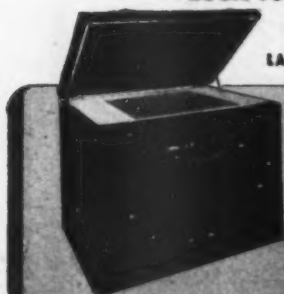
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New FM Claimant

Muzak Corp., which furnishes wired music now, asks FCC for three FM channels to provide programs by subscription.

A nationwide subscription radio service is being planned by a group identified with Muzak Corp., which at present furnishes wired music to restaurants, hotels, industrial plants, and other establishments (BW—Sep. 14'40, p. 44).

• **FM Channels Asked**—The venture was presented for the consideration of the Federal Communications Commission at its current hearings on postwar allocation of wave bands by Joseph L. Weiner of New York, chief counsel for William B. Benton, president of Muzak Corp. Benton also is vice-president of the University of Chicago and chairman of Encyclopedia Britannica, Inc.

Weiner asked the FCC to allocate three FM (frequency modulation) channels to the proposed service, one each for classical music, popular music, and



PAY LOAD

This week an American Airlines plane laden with war goods, clothes, fabrics, shoes, and cosmetics roared off New York's La Guardia field for Burbank, Calif., thus chalking up an aviation "first"—daily air freight service (BW—Sep. 23'44, p. 19). I. Miller & Co., with a consignment of shoes aboard, was quick to pin down the publicity value of the flight with newspaper ads, and a Fifth Avenue window display (above). And the fact that the shoes were the first ornate models to be made by the company under the partially lifted wartime regulations was an extra advertising premium.

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can put your products
into empty
world market baskets



DEVELOPING WORLD MARKETS FOR YOU

World market baskets are empty.

And in the near future . . . sooner than we think perhaps . . . will come an opportunity for many American manufacturers of industrial equipment to establish themselves in foreign markets as never before.

Possibly your export department has been neglected, or broken up, due to war conditions. Or maybe you have never exported your product and are considering building postwar business through sales abroad.

In either case, Rogers Diesel and Aircraft Corporation's Export Division can help you move into these markets as fast as they open up . . . and help you sell them profitably.

R. D. A. has the men, both here and abroad, who speak the languages and know the customs and buying habits of each country.

R. D. A. has the contacts with foreign commissions and buyers who are coming to America to buy equipment for the rebuilding of war-torn countries.

R. D. A. has the service set-up, so vitally important in the sale of heavy equipment to foreign markets.

R. D. A. has the financial capacity to take over the whole foreign sales assignment on a mutually profitable and equitable basis.

And R. D. A. has the experience...a long record of export sales achievement.

When Rogers Diesel and Aircraft Corporation handles your export sales, you eliminate many of the headaches and uncertainties, the expense and gamble associated with selling out of this country—conditions likely to be intensified in a chaotic postwar world.

Six months from today may be too late to stake a claim in foreign markets. We'd like to sit down with you and talk it over . . . soon.

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Export Division: 1120 Leggett Avenue, New York 59, New York. Divisions: Hill Diesel Engine Company, Edwards Company, Edwards Aircraft Products, Inc., Ideal Power Lawn Mower Company.

cultural and educational programs, with no commercial announcements. Each would be broadcast throughout the day on its own channel. Subscribers could select what they want.

• **Patented Squeal**—The service would be confined to subscribers by a patented device creating a "pig squeal" in non-subscriber receiving sets tuned to the frequencies utilized. Subscribers would be furnished with a gadget eliminating the squeal.

Weiner told the commission that among members of the board of the new firm sponsoring the service would be Beardsley Ruml, chairman of the Federal Reserve Bank of New York, Chester Bowles, head of the Office of Price Administration and former partner of Benton's in Benton & Bowles, advertising agency, and "equally responsible and representative persons."

• **Fly Interested?**—Benton disclosed in Chicago last week that he has offered James Lawrence Fly, chairman of FCC, a post in the new corporation. Fly, who expects to leave the commission after the November elections, has declined to comment. However, just before Weiner was called as a witness by FCC Counsel Charles R. Denny, Fly recessed the hearings for five minutes, and left Commissioner Paul A. Walker to preside, as acting chairman, during Weiner's testimony.

• **Predecessor Failed**—Wired Radio, Inc., predecessor of Muzak, undertook a wired broadcast service in the Cleveland area in the early thirties, but the venture failed. Muzak's new service would be similar, but would use FM channels instead of wires.

Report on Ads

Comparative survey in six sections will be published monthly by new concern. First edition to appear Jan. 10, 1945.

A new monthly comparative advertising survey to be called "Leading National Advertisers" will make its bow on Jan. 10, 1945. According to the publishers—Feldon-Beirnes Publishing Co., Inc., of Chicago—the service will give comprehensive data on advertising programs of leading national brands as well as data regarding advertising media arranged in a form handy to use.

• **In Six Sections**—The survey will be published on the tenth of every month, in six sections covering agriculture, automotive-aviation-transportation, drug-toilet goods, foods-beverage, homebuilding, and general.

Each edition is to be indexed by company name, brand name, and agency; advertising schedules will be shown for the current month, and dollars of expenditure to date; each medium will be ranked by advertising revenue for every brand and product group; and all media will be ranked or charted by revenue from all leading national brands and from each major product group.

• **Old-Timers at Helm**—Both O. A. Feldon and A. E. Beirnes (president and vice-president respectively of the new concern) are old-timers in the publications field.

Beirnes founded Standard Rate &

Data Service and was head of the Advertising Record, a comparative advertising service similar to the new venture, which went out of business in 1938. Feldon was until recently a partner in the advertising agency of MacFarland, Aveyard & Co., and before that he was with Macfadden Publications, Inc., and McGraw-Hill Publishing Co., Inc.

• **Stiff Competition**—Feldon-Beirnes will be bucking stiff competition from Publishers Information Bureau, Inc., which has been publishing for 28 years.

P.I.B.'s detailed service and year-end roundups are considered by some publishers to be the most authoritative publications of the kind.

F&DA Loses

Candy manufacturer is cleared because he testified previously in similar FTC case. Corporation case also dropped.

Since both the Federal Trade Commission and the Food & Drug Administration got increased powers half a dozen years ago, manufacturers in the food, drug, and cosmetic industries have had to watch their step. Those accused of violations by one agency often were called to task by the other. An end to this often confusing practice was seen last week in the Chicago federal court ruling which granted relief to Carl A. Futter and his Carlay Co., manufacturer of Ayds candy sold in connection with a weight-reducing plan.

• **Testified Previously**—The court relieved Futter of personal liability in the case because, before the Food & Drug Administration brought criminal misbranding charges against him, the candy manufacturer had testified under a subpoena from the Federal Trade Commission, in a complaint on substantially the same grounds cited by F&DA.

Sec. 9 of the FTC act states that "no natural person [as contrasted to a corporation] shall be prosecuted, or subjected to any penalty . . . on account of any transaction, matter or thing concerning which he may testify . . . before the commission in obedience to a subpoena issued by it. . . ."

• **Wins Again**—The F&DA information was directed against Futter as an individual and also against the Carlay Co. Little time elapsed before Futter's attorney was back before the court with a special plea averring that the Carlay Co., being a one-man corporation, was Futter's alter ego, and, therefore, that the exemption in the FTC act also stood to protect the corporation. The court has now granted this plea, with



BIRTHDAY STICKER

Ready for its "premier" sale on Oct. 30 is the Post Office Dept.'s latest commemorative stamp—a three-center that marks the motion picture in-

dustry's 50th anniversary. Depicted in this issue are bands of embattled troops enjoying a movie in a jungle clearing. Its initial sale will be in New York, the industry's birthplace, and in Hollywood, scene of its maturity.

the result that the F&DA case is now minus its defendants.

No order has been issued in FTC's case against Futter and his Ayds candy advertising, but it is reported that medical testimony on both sides of this action was in agreement with the general "Ayds" reducing plan theory that candy appeases appetite, causing people to eat less food, thus reduces weight. **Conflict in Opinion**—This is directly opposite to the line of scientific testimony in certain other food and drug cases. The commission has had this hot potato on its hands since last March, when final argument of the case was completed.

Whether the Chicago court's action will be the last heard of F&DA's case against Futter and his candy remains in doubt since it is reported that the Justice Dept. is considering an appeal.

Break for Chains

Atlanta proposes lower license fees after committee makes investigation revealing wide variance in levies.

The chain grocery store, for many years treated like a stepchild by municipal taxing bodies, will receive a substantial reduction in city license fees in Atlanta next year if the city council approves a proposal of its finance committee.

Would Cut Fees—Atlanta grocery stores and meat markets would save around \$7,000 annually through reduction of the license fee on smaller grocery units from \$25 to \$20 and on larger stores from \$500 to \$350, while on smaller meat markets the reduction would be from \$30 to \$25 and on larger markets from \$250 to \$150.

First taken up by the council's tax committee, action on the proposal was deferred until a thorough investigation of the fees was made. The study revealed (1) retail dry goods stores—department stores—carrying over \$40,000 in merchandise pay only \$100 license fee; (2) wholesale hardware concerns carrying over \$50,000 in stock pay \$150; retail hardware stores with over \$7,500 in goods pay \$100; and (3) wholesale drug concerns pay \$100 and retail drug stores with stock valued at over \$10,000 pay the same amount.

The investigation also disclosed that wholesale meat packers, with an unlimited territory for doing business, pay \$300.

Used as Pattern—Chain store operators in Atlanta are anxious to get an "adjustment" on the city's license fee



BEFORE THE LITTLE LADY'S much bolder, somebody will tell her what complete protection is. For your protection, we'll explain how valuable insurance can really be when you have the benefits of Hardware Mutuals policy back of the policy.

The policy back of the policy is simply a way of doing business. It assures complete protection by making your interests our first consideration. Suppose you buy Workmen's Compensation and Liability insurance. Your workers are protected by a safety engineering program that corrects every individual plant hazard. Result: increased production, lower costs.

The policy back of the policy has "pocketbook advantages,"

too. It means full-standard policies at low cost. And each year since organization, Hardware Mutuals policyholders have received substantial dividend savings. These now total over \$87,000,000.00. Is it any wonder hundreds of thousands of policyholders are attracted to all lines of Hardware Mutuals insurance?

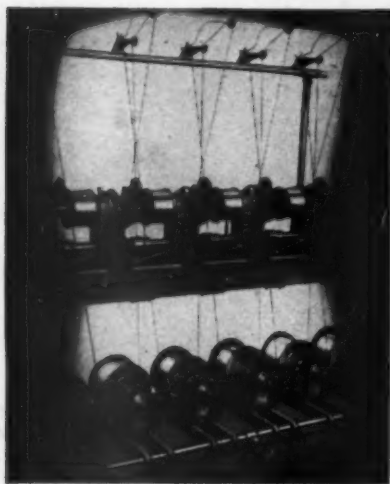
Let our representative help you plan the insurance you need. Enjoy increased service and savings with the policy back of the policy. Meanwhile, send for our free booklet—a timely, practical Guide to Help You Employ Disabled Veterans.

FEDERATED HARDWARE MUTUALS
Hardware Dealers Mutual Fire Insurance Company, Home Office, Stevens Point, Wisconsin
Mutual Indemnity and Hardware Insurance Company, Home Office, Owatonna, Minnesota
HARDWARE MUTUAL CASUALTY COMPANY
Home Office, Stevens Point, Wisconsin
LICENSED IN EVERY STATE



Hardware Mutuals

Stevens Point, Wis. ★ Owatonna, Minn. ★ Offices Coast to Coast
Compensation, Automobile and other lines of non-assessable
CASUALTY AND FIRE INSURANCE



Close-up of four sections of a 12-head FIDELITY Spooling Machine

For the production speed and smooth lay you want ... use FIDELITY Wire-Spooling Systems.

There are a dozen types of FIDELITY Wire-Spooling Machines to take care of wire from 18 gauge B&S to diameters as low as .0015".

Each gives you accurate winding and uniform lay. Simple to operate, variable speed and traverse, readily adjustable to different size spools, can be equipped with stop motions and brakes to prevent over-running. They may be had to wind from spools, reels or coils or, in some cases, directly from production machines or annealing furnaces. Available in single or multiple units.

Whether you wind large or small spools, sticks or quills, fine or coarse wire in single or multiple ends, you will find FIDELITY Wire Spoolers adaptable, adjustable, economical.

For war or peace-time production, you gain by the multiple advantages from FIDELITY Wire-Spooling Systems. Used by electrical and mechanical equipment manufacturers throughout the country.



Write for special bulletin.

BONDS —
Buy more than before.

FIDELITY

MACHINE COMPANY

Makers of Automatic Precision Machines

3906-18 FRANKFORD AVE., PHILADELPHIA 24, PA.

structure because they contend that Atlanta's system is used as a pattern throughout the state. Since most of them are national chains operating all over Georgia, they would benefit substantially if reductions were made all down the line.

Time was when local municipalities resented chain stores, contending that they were owned and controlled by big outside interests, that they contributed nothing to the community, and they took all their profits outside the state.

• **New Attitude**—Today, however, this sentiment has changed somewhat, the chain stores and their personnel being recognized as a part of the community.

Typical example to substantiate this point is seen in the latest figures of purchases in Georgia by the Atlantic Commission Co., produce-buying affiliate of the Great Atlantic & Pacific Tea Co. Georgia growers and shippers of fresh fruits and vegetables received \$2,785,716 in a single year for produce marketed through this chain, the report showed.

• **Less Opposition?**—The gains which independent merchants have made during the war at the expense of the chains (BW—Sep. 9'44, p75) make the chains hope that the tax-reduction proposal will encounter much less opposition from the local merchants than it would normally when the resolution reaches the floor of the city council.

CBS GAINS VANTAGE POINT

Following fast on the heels of testimony by Paul W. Kesten of Columbia Broadcasting System before the Federal Communications Commission last week that three companies had told him they "could" make high-frequency television transmitters has come a CBS announcement that Federal Telephone & Radio Corp. has accepted an order, for delivery within eight months. Federal's acceptance of the order gives CBS a vantage point for its fight to hoist television channels into the upper spectrum (BW—Oct. 1'44, p87).

CBS claims that the transmitter will provide vastly improved pictures in full color, broadcast on wide bands and high frequencies, taking advantage of improvements in secret war research.

Apparatus to receive the fine-screen pictures will be available, CBS announced, with Zenith Radio Corp. "actively cooperating."

RADIO AUDIENCE GROWS

In spite of the ban on radio set production since May, 1942, increased consumer income and increased demand for news and entertainment have created a new peak of 32,500,000 radio families,

compared with 28,839,730 radio families in 1940, according to a new study of U. S. radio ownership made by the Columbia Broadcasting System.

Some of this gain was made possible by an estimated backlog of 13,000,000 radio sets produced before production was cut off, and by redistribution about 20,000,000 secondary sets.

The CBS findings are based on U. S. census of 1940, registration for ration book No. 4, and a survey WPB's Office of Civilian Requirements which indicated that 89% of all U. S. families own radios.

Radio families are divided among time zones, according to CBS, as follows: Eastern, 50.5%; Central, 35.1%; Mountain, 3.3%; Pacific, 11.1%. Seasonally, New England has the highest percentage of radio-owning families (96.8%); the East South Central states (Kentucky, Tennessee, Alabama, Mississippi) have the lowest (69.3%).

P. S.

Not since the war made liquor scarce have price wars among package stores reared their ugly heads. New York is exploring the possibility of continuing this peaceful state by enforcing state fair trade laws through the State Liquor Authority. There is some question whether the agency has this power, whether it would have to obtain through additional state legislation. Only other state to adopt this device for outlawing price wars is New Jersey where it has been an outstanding success. . . . Manufacturers who can't convert from war production may get a foot in the postwar market door by offering reconditioned models to the appliance-hungry public. Singer Sewing Machine Co., for example, is currently selling reconditioned vacuum cleaners in a few of its 700 wholly owned retail outlets. . . . Paris couturiers are preparing their first buyer collections of spring and summer fashions for the end of January, hoping that both American and British buyers will be able to attend. . . . Purchasers of Grosset & Dunlap include Little Brown & Co. and Charles Scribner's Sons, as well as the three buyers originally announced (BW—Oct. 7'44, p89). Little Brown & Co., Scribner's, Random House, and Harper & Bros. hold equal shares of Grosset & Dunlap stock; Book of the Month Club holdings are somewhat larger. . . . Seventeen, newest venture of Walter H. Annenberg's Triangle Publishing Co. (which also publishes the Philadelphia Inquirer), will get a boost next January when Triangle discontinues Click magazine (over 1,000,000 circulation) to divert its paper quota to the new magazine edited for teen-age girls.



"HELLO! Did Mr. Collins send you?"

When come in. Can I pour you a drink?

Mr. Collins and I have known each other for a dog's age. Through his job as V.P. and Director of Sales and Advertising at Canada Dry Ginger Ale, Inc., of course. He's all business.

That's why he likes me . . .

I'm like this. I'm that typical Cosmopolitan reader all the Ad men want to talk to. I'm young. (Most Cosmopolitan readers are under 35.) I'm married. I'm sociable. I'm always drinking ginger ale and sparkling water "empties" back to the grocer's. Don't look at me that way—our place is no roadhouse. But my meal-kit is getting ahead in this world.

We can afford our share of good times . . . And we have them!

I'm young—so what?

So I'm receptive to new ideas. New gadgets. New brands. And if I hit on something that's habit-forming—well, the habit has a long time to run.

Mister, are you beginning to see why Canada Dry keeps courting girls like me in Cosmopolitan?

Some magazine—sex!

Is Cosmopolitan. Rolls up its sleeves and sets out to entertain us live ones. Holds us, too! With gripping stories. With great writers. Many's the best-seller I've thrilled to in Cosmopolitan—long before it ever got to be a book! And I like that, too!

So nice meeting you! And I do hope I'll be seeing you again. But soon. And in Cosmopolitan.



MR. COLLINS KNOWS THAT—

- 1 Cosmopolitan Readers are YOUNG!
- 2 Cosmopolitan Readers are CITY PEOPLE!
- 3 Cosmopolitan Readers have MONEY TO SPEND!

Cosmopolitan

GREAT WRITING MAKES GREAT READING!

LABOR

Security at Stake

Constitutional amendment confronting California electorate would outlaw closed shop, union shop, and m. of m.

The presidential election is only one of the issues that will lure the California electorate to the polls on Nov. 7. The other, which has stirred up as much partisan interest on the Coast as the Roosevelt-Dewey contest, holds the fate of the closed shop in California.

• **"Right to Work"**—The issue goes to the voters for a yes or no vote on Proposition No. 12, a proposal to amend the state constitution by defining the "right to work" as being free from interference because employee "does or does not belong to or pay money to a labor organization."

Adoption would outlaw not only the closed shop (under which only members of a specified union may be hired by the subscribing employer), but also the union shop (employees must join the union or be fired) and maintenance of membership (union members must keep dues paid up or be fired).

The proposition found its way to the ballot through the instigation of the vigorously antiunion Merchants & Manufacturers Assn. of Los Angeles (BW—Jul. 15 '44, p94), and it has won the somewhat belated support of the Los Angeles Chamber of Commerce.

• **Estimates Revised**—At first, observers were disposed to discount the chances that the closed shop ban would pass, for California has approximately 1,500,000 new war workers, most of whom are members of unions. But as election day nears, the experts are revising their estimates. Factors contributing to the new appraisal of voter sympathies are:

- (1) Failure of C.I.O. organizations to pitch in, as they do for a "cause," behind the vigorous opposition which the California A.F.L. has organized.

- (2) Indications, based on confidential polls, that 45% of workers in populous southern California favor the amendment, that 35% oppose it, and that the remaining 20% are on the fence.

- (3) The tremendous popularity of the proposal in rural areas.

• **A.F.L.'s War Chest**—The A.F.L., with its long-established tradition of closed shop relationships at stake, is waging a fierce fight against Proposition No. 12. Its war chest for this purpose

is upwards of \$200,000. Veteran leaders are worried. They know that old-line unionists in the San Francisco Bay area will vote heavily against the amendment. But how about the new war workers, to whom tradition may mean less than the ability to enter an open labor market after the war when jobs are not so plentiful?

That's where the C.I.O.'s passive attitude—its token resistance to the amendment—rubs the A.F.L. the wrong way. Whatever union security is enjoyed by C.I.O. affiliates has been won during the war. In no case have they achieved the closed shop, which is the ultimate in union security.

• **A New Field?**—C.I.O. unions in California, say observers, have little to lose but something to gain if Proposition No. 12 becomes a part of the constitution. Smashing the closed shop not only would free thousands of A.F.L. members of their obligation to remain members, but also would open a new and fertile field of organization for the C.I.O.

Efforts by Paul Shoup, president of the Merchants & Manufacturers Assn., to swing other business groups into support of the proposition have been marked by little success. Many businessmen fear labor reprisals, and the feeling among them is strong that adoption of the amendment would only

compound the opportunities for industrial strife.

• **Views Conflict**—Political analysts of both camps take conflicting views of the gains which the amendment has won among workers in the informal surveys. Republicans interpret the trend favorably, for until now they have been afraid that the efforts of A.F.L. to get out the organized labor vote to defeat the proposition would also snow Gov. Dewey under. Fourth-term supporters, on the other hand, argue that even if workers vote for the amendment they will cast their ballot for President Roosevelt.

Unions Fight Ban

Florida and Arkansas proposals to outlaw closed shop draw organized fire. Rights of workers are defined.

Constitutional amendments banning closed shops will be voted on in Florida and Arkansas on Nov. 7. In both states, the issue has aroused less political controversy than in California.

• **Unions Keyed Up**—In Florida, the amendment would make it illegal to refuse to employ a worker because of membership or nonmembership in a union. It is meeting strong opposition of Congress of Industrial Organizations and American Federation of Labor unions. Other labor control laws fos-



"BOYPOWER" PART-TIME

Young boys line up three abreast for jobs on the new "after-school" shift at Milwaukee's Allis-Chalmers plant. With the approval of parents and

educational authorities, they'll work four hours a day. Like part-time "boy-power" employed to ease West Coast help shortages (BW—Jun. 5 '43, p86), these youths—16 to 18—must maintain good scholastic standing.



"Warehouse, Port of Spain, Trinidad," by Clarence Holbrook Carter

This Port-Of-Spain Warehouse Awaits Your Exports

Soon a big and growing market for American merchandise will "re-open for normal business." The Caribbean islands, Venezuela and the Guianas offer an eager, friendly market for products of all kinds . . . a nearby trading area for business executives with an eye to the future.

These beautiful, tropical countries are close-by, easy to contact and travel to. The Alcoa fleet has long served this area . . . calling at ports large and small. Through the years we have learned much about the needs of the people there. If you are faced with the post-war problem of selling an increased productive capacity, you can build a worthwhile vol-

ume of business in the neighborly Caribbean . . . where pent-up demands will mean increased post-war sales for many alert business concerns!

Send for Informative Book

We have compiled an interesting free book for business executives. It contains tables on hundreds of products normally imported into the Caribbean area; also lists tropical products available there for export to us. Send for a copy of "Export Market Opportunities." Write Department B, Alcoa Steamship Company, Inc., 17 Battery Place, New York 4, New York.



Alcoa

ALCOA STEAMSHIP COMPANY, INC.

OFFICES IN BALTIMORE, CHICAGO, MOBILE,

MONTREAL, NEW ORLEANS, NEW YORK, NORFOLK, SAN FRANCISCO



No matter how fast your secretary answers the buzzer, you always have a wait . . . a short while or long time. All too often when you need her instantly, she's not at her desk.




But don't blame her for it! No, sir . . . old-fashioned, two-person dictation is the trouble.

Why put up with this antiquated system? There is a better way to get notes, memos and instructions on record quickly and conveniently.

It's the Dictaphone Method, and it helps you keep on top of your job.

*"three seconds flat,
Mr. Twitchell!"*



Gone are worrisome waits and lost ideas when you use a Dictaphone dictating machine! You just pick up the speaking tube  if you have the Acoustic type, or talk to the desk microphone  or hand microphone  if you have Electronic equipment. With Dictaphone Electronic Dictation, you can also record both ends of 'phone calls and, under proper conditions, over-the-desk conversations. Either type doubles your ability to get things done. Send for free descriptive booklet. DICTAPHONE CORPORATION, 420 Lexington Ave., New York 17, N. Y.

DICTAPHONE

DICTATING AND RECORDING EQUIPMENT

The word DICTAPHONE is the registered trade-mark of Dictaphone Corporation, makers of dictating machines and other sound recording and reproducing equipment bearing said trade-mark.



tered by Attorney General Tom Watson are under attack in state courts.

The Arkansas amendment, in addition to the closed shop ban, would prohibit employers from entering into contracts which would deny employment to anyone refusing to join a union. As in Florida, labor control laws already have a place in Arkansas statute books (BW-Aug.26'44,p28).

● **How They'd Restrict**—Provisions of the two proposed amendments, as they pertain to labor unions, are:

Florida—"The right of persons to shall not be denied or abridged on account of membership or nonmembership in any labor union, organization; provided that this clause shall not be construed to deny or abridge the right of employees by and through a labor organization or labor union to bargain collectively with their employer."

Arkansas—"No person shall be denied employment because of membership or affiliation with or resignation from a labor union, or because of refusal to join or affiliate with a labor union; nor shall any corporation or individual or association of any kind enter into any contract, written or oral, to exclude from employment members of a labor union or persons who refuse to join a labor union, or because of resignation from a labor union; nor shall any person against his will be compelled to pay dues to any labor organization as a prerequisite to or condition of employment."

"The General Assembly shall have power to enforce this article by appropriate legislation."

● **Heart of the Contract**—Requirement to join a union as a prerequisite to employment and discharge for nonmaintenance of membership are basic features of union shop and closed shop contracts.

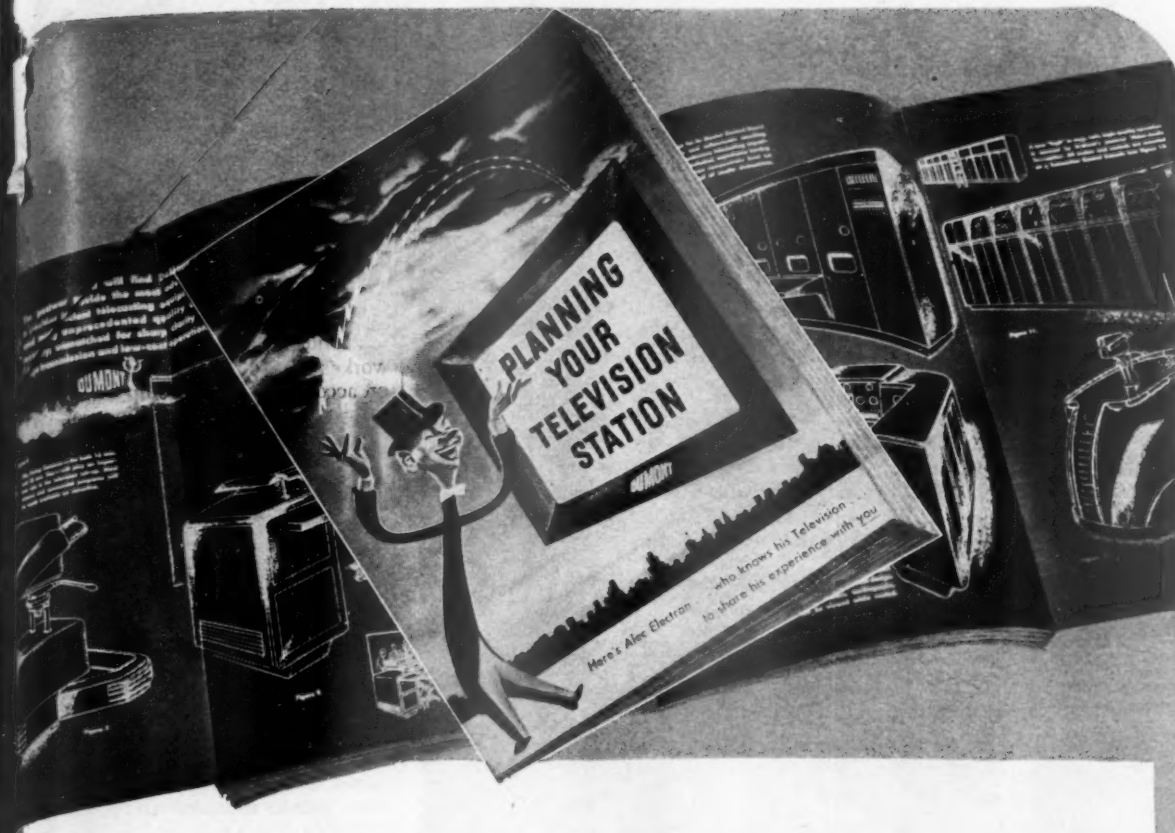
In Alabama (BW-Sep.9'44,p26) and Wisconsin cases, the National War Labor Board has ruled that its authority under wartime emergency statutes takes precedence over state restrictions on maintenance of membership. The issue is still in the courts.

STEP TOWARD AUTONOMY

Control of Los Angeles Local 9 of the C.I.O. Industrial Union of Marine & Shipbuilding Workers of America passed from the hands of a rump group to a clique more obedient to national I.U.M.S.W.A. direction at a general meeting Sunday attended by only 400 of the 22,000 members.

The meeting marked emergence of a new "front man," C. R. Brown, who was authorized by John Green, president of the union, to direct union affairs

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WHAT SHOULD A TELEVISION STATION COST?

Prospective station owners are fast discovering that DuMont has *the answers on television* . . . and willingly shares its "television know how" for the advancement of this magnificent new art. Prospective station operators also are discovering that DuMont telecasting equipment is "tops" in signal transmitting efficiency and effectiveness, and leads in installation and operating economies.

Eloquent evidence of DuMont leadership is provided in the design and construction of 3 of the nation's 9 television stations in service today . . . and in the operation (for more than 3 years) of Television Station WABD, New

York. Just as DuMont's development of the DuMont Cathode-ray Tube made television commercially practical, so DuMont pioneering in station design and operation has set a pattern for profitable station management. This pattern is available to you.

"Planning Your Television Station" tells how to insure a low-cost telecast operation . . . outlines your equipment requirements . . . offers you a surprising arrangement for *re-serving* equipment now, and for custom-building your telecasting set-up and training your personnel soon after victory. Please request this booklet on your firm letterhead.

Copyright, 1944, Allen B. DuMont Laboratories, Inc.

DUMONT



Precision Electronics and Television

ALLEN B. DUMONT LABORATORIES, INC., GENERAL OFFICES AND PLANT, 2 MAIN AVENUE, PASSAIC, N. J.
TELEVISION STUDIOS AND STATION WABD, 515 MADISON AVENUE, NEW YORK 22, NEW YORK

How *Curtiss-Wright* SPEEDS

Propeller Output

With a 2000-ton squeeze this giant Birdsboro Hydraulic Press quickly forms propellers for Curtiss-Wright. It presses the camber (curved) plate of hollow steel propeller blades to the exact shape necessary for the correct thrust, and it does the job easily with the speed to meet today's urgent demands.

Your future metal pressing jobs will be done with greater accuracy, at lower costs with a Birdsboro Hydraulic Press. Take advantage of our diversified peace and wartime experience in designing specialty presses for specific needs. Write Birdsboro now, for complete design-engineering help.

BIRDSBORO STEEL FOUNDRY & MACHINE CO.
BIRDSBORO, PA.



BIRDSBORO
HYDRAULIC PRESSES

pending an election of officers next month. He replaces Walter S. Pollard, sent to Los Angeles two years ago to direct Local 9 after its loss of autonomy during hectic growth from a peacetime 700 to 20,000 persons after Pearl Harbor. Pollard will remain in the background with the title of West Coast regional director, and will devote his attention primarily to political matters.

The new shift in control is another step toward restoration of self rule, but the rank and file, suspicious of Pollard's continued presence, doubts that autonomy will come easily. Adding to the doubt is the fact that several plans have been advanced recently by Green, among them a recent trial period of "partial autonomy," but nothing has come of them.

Local 9's membership consists principally of employees of the Todd-Los Angeles Shipyard Corp., San Pedro, and Bethlehem Steel Corp.'s Terminal Island yard.

HOLLYWOOD STRIKE OFF

Regional war labor board agreement to consider a Hollywood dispute involving striking studio decorators has ended, at least temporarily, threats of a union jurisdictional battle that would tie up the movie industry (BW-Oct. 14, p. 106).

Herbert Sorrel, president of the Conference of Studio Unions, ordered decorators back to work, pending the board's decision, expected in two weeks. Many doubt, however, that any decision will do more than postpone a showdown between C.S.U. and the International Alliance of Theatrical Stage Employees (A.F.L.) over just which studio employees can be classified properly as theatrical.

WAGE TRUST VETOED

Deferred payment plans constitute hidden wage increases and will not be approved by the National War Labor Board. Milwaukee Electric Railway & Transport Co. wanted to set up a trust fund into which sums equal to 6% of workers' 1944 earnings would have been paid, to be held until distribution was authorized by NWLB. Unions approved. But NWLB said no.

PAY PROGRESSION RECAST

Regional war labor boards may approve voluntary wage progression schedules which do not raise employees to the top of wage-rate ranges faster than in twelve months for unskilled jobs, 18 months for semiskilled work, and 24 months for skilled jobs, under a new order of the national board.

Boycott Sustained

Circuit court vacates the injunction against New York City electricians' refusal to install equipment made elsewhere.

A nine-year fight by eleven major electrical manufacturers to break a boycott by Local 3 of the International Brotherhood of Electrical Workers (A.F.L.) and five associations of electrical contractors last week received a setback as the U. S. Circuit Court of Appeals in New York set aside a federal injunction against the union, obtained last year (BW—Oct. 2'43, p99).

Monopoly Fought—Filed in 1935 by 14 companies, three of which have dropped out, the injunction suit sought to enjoin the union from "successfully enforcing" a monopoly plan which permitted marketing and use in New York City of only that equipment which was manufactured in the metropolitan area by concerns with I.B.E.W. contracts.

While the court held, in a 2-to-1 decision, that it was apparent that the boycott raised the cost of electrical equipment in New York City to as much as twice its cost elsewhere, and that it injured not only the excluded manufacturers and rival unions but also the consuming public, it said that precedents indicate the Supreme Court "is now settled in its present view of the inapplicability of the Sherman act even to labor controversies whose most injurious effects may be to other than the immediate parties."

Precedents Cited—Decisions by the Supreme Court in cases of the United Brotherhood of Carpenters, the International Hod Carriers, and the American Federation of Musicians were cited as "too closely similar to the case at bar, indeed going beyond it in some aspects, to permit . . . the injunction based upon it to stand."

In the hod carriers' case, the union was upheld in its fight against use of labor-saving truck mixers. In the musicians' case, the court ruled for the union in its boycott campaign against "canned music." The carpenters' case involved a strike and boycott against a brewery company, and the high court ruled that the union was "immunized" against prosecution.

Danbury Hatters' Counsel—The companies were represented by Walter Gordon Merritt, attorney in the famous Danbury Hatters antitrust case of 1908, in which a boycott of hats manufactured by a nonunion firm was held a violation of the Sherman act, and the union forced to pay triple damages.



CLEAN, SANITARY FLOORS

Bolster Worker Morale

Clean floors are much more than a matter of good housekeeping. Wholesome surroundings help keep workers happy, and happy workers spur production! And of course clean floors are safety's ally . . . they speed trucking . . . they reduce fire hazards.

Proper floor care does indeed pay. And it pays especially—in the case of grease-caked floors—when the scrubbing is done with a Finnell 84-XR. This Industrial Dry Scrubber, with its two powerful scarifying brushes, digs out embedded accumulations in one-tenth the man-hour time required when hand-spudding! Spares the back-breaking effort of spudding, and is far more thorough. Has a special type of switch that reverses the motion of the brushes and re-sharpens them automatically. The machine is adaptable to wet-scrubbing, steel-wooling, waxing, and polishing.

For free floor survey, consultation, or literature, phone or write nearest Finnell branch or Finnell System, Inc., 3810 East Street, Elkhart, Indiana. Canadian Office: Ottawa, Ontario.

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STANDARDIZATION PLUS SPECIALIZATION

Powell has been making valves—and only valves—for 97 years. The result is an exceptionally complete line of industrial valves of all types—Globe, Angle, Gate, Y, Check, Relief, etc.—in bronze, iron and steel and a wide variety of pure metals and special alloys for corrosion resistance.

As far as possible the Powell Line is *standardized*. But *special* designs are often necessary to meet special requirements in flow control. When this occurs, Powell Engineering has the answer.

Shown here is a Class 300-pound Cast Alloy Steel Gate Valve with flanged ends. To accommodate insulated pipe, it has a 12" port size venturied to 20" size end flanges. An enclosed, explosion proof, electric motor operator, mounted on top, provides quick, positive opening and closing.



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Cincinnati 22, Ohio

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100 Amp. 575 Volt
Shutlbrak Switch
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ON **THE INGENUOUSLY DESIGNED
KAMELAMP FUSEHOLDERS
SHUTLBRACK Switches**

clamp the fuses tight. Insert the fuse — turn the lever — and you have a copper-to-copper connection under strong and continuous pressure.

Convenient, too, are the Pressure Type (Solderless) Connectors, which make possible quick, sure connections with both line and load wires or cables — connections which will not "ease up" or become loose.

Because of these and other outstanding advantages, plants producing war materials have purchased thousands of these switches. Some are used singly — others are banked in groups —

or assembled in well-designed switchboards or panelboards. Still others are installed as plug-in units for Busduct.

Capacities: 30 to 1200 amperes, inclusive, for 250 volts AC or DC, and 575 volts AC, in 2, 3 and 4 pole types. Approved by Underwriters' Laboratories, Inc.

For Detailed Information, write for Bulletin No. 70 . . . Frank Adam Electric Company, Box 357, St. Louis, Missouri.



Citadel Falls

A.F.L. machinists win bargaining agency election over C.I.O. at Douglas Aircraft plant in Santa Monica, Calif.

The Douglas Aircraft Co.'s vast Santa Monica (Calif.) plant, the citadel of the open shop, has been organized. Douglas must bargain with a union and perhaps even accept a closed shop.

● **Machinists Won**—In the fourth National Labor Relations Board election in less than one year, 9,647 of an eligible 11,000 workers cast ballots Oct. 11. 5,891 voted for the International Association of Machinists (A.F.L.) and 3,478 for the United Automobile Workers (C.I.O.). One hundred and eight votes were declared void and 80 were challenged.

The election was a runoff following by one week a ballot sought by the two unions which in January and February, 1944, had failed twice to crack the strong no-union front (BW—Sep. 9 '44, p103). In the voting Oct. 4, the C.I.O. received 38% of the votes cast, the A.F.L. 35.3%, no-union 25.6%, and challenges 1.1%. By finishing third, the no-union forces were eliminated from the runoff last week.

● **Bridges vs. Cheesecake**—Intensive campaigning preceded both elections. The C.I.O. brought in Harry Bridges, West Coast longshoremen's leader and California director of C.I.O., to spearhead the drive. The A.F.L. resorted to leg shows, cartoons, and music, and during lunch periods pretty girls in shorts attracted attention to the slogan: "Vote A.F.L."

Last January, 39.7% of the workers voted no-union, 34.3% C.I.O., and 26% A.F.L. in the first election; 53.3% no-union and 46.7% C.I.O. in the runoff.

● **Principal Issue**—When Donald Douglas, president of the firm, sits down with I.A.M. negotiating committeemen, the argument of open vs. closed shop is expected to be the principal issue, but a compromise is not improbable.

The National War Labor Board recently ordered a maintenance-of-membership contract with an escape clause—permitting withdrawal from a union during the 15 days immediately following the signing of a union contract annually—when a similar issue came up between Douglas' Vernon (Calif.) plant and the U.A.W.

In addition to its victory at Santa Monica, the I.A.M. has been successful in elections at Douglas plants in El Segundo, Calif., and Tulsa, Okla.

Swing into action for the

6TH War Loan

Scheduled for November



PLAN YOUR PLANT DRIVE NOW!

Good organization will be needed to sell the 6th. The task of raising the huge sum required will be the most difficult ever asked of Industry. As each new military success brings us closer to Victory, the public naturally will feel that the urgency of war financing is lessened—whereas it isn't. So organize now to prevent a letdown on the home-front from causing a letdown on the fighting front. Build your plant's payroll campaign around this fighting 8-Point Plan. You don't have to wait for the official Drive to start—swing into action NOW!

1 BOND COMMITTEE—Appoint a 6th War Loan Bond Committee from labor, management and each representative group of the firm.

2 TEAM CAPTAINS—Select a team captain, for each 10 workers, from men and women on the payroll—but not in a supervisory capacity. Returned veterans make most effective captains.

3 QUOTA—Set a quota for each department and each employee.

4 MEETING OF CAPTAINS—Give a powerful presentation of the importance of the work assigned to them. Instruct them in sales procedure. Have them carefully study the Treasury Booklet, *Getting the Order*.

5 ASSIGNMENTS—Assign responsibilities for:
(a) Music, speeches and announcements of the opening rally.

(b) Pre-drive letter to employees from management and labor.
(c) Competitive progress boards.
(d) Meeting schedules, etc.

6 CARD FOR EACH WORKER—Dignify each personal approach with a pledge, order, or authorization card made out in the name of each worker. Provide for a cash purchase or installment pledge. Instruct each captain to put a pencil notation on the card to indicate the subscription he expects to solicit from each worker.

7 RESOLICITATION—People don't mind being asked to buy more than once. Resolicit each employee toward the end of the drive in a fast mop-up campaign. Call upon your State Payroll Chairman; he's ready with a fully detailed plan—NOW!

8 ADVERTISE THE DRIVE—Use all possible space in the regular media you employ to tell the War Bond story.

The Treasury Department acknowledges with appreciation the publication of this message by

BUSINESS WEEK

This is an official U. S. Treasury advertisement prepared under the auspices of Treasury Department and War Advertising Council

5 WAYS TO MODERNIZE YOUR PRODUCT

1. Eliminate mitre gears

2. Get around obstacles

3. Eliminate universal joints

4. Eliminate spur gears

5. Connect related motions

Eliminating the complexities of rigid shafting means fewer parts, less weight, New Economy of Manufacture. STOW Flexible Shafting is the simplest means of transmitting power, in-line or out-of-line, around obstacles, through congested areas. Design can be streamlined and modernized. Parts can be placed where most convenient for assembly and for after-purchase service.

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Company.....

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City..... State.....

STOW
MANUFACTURING CO.

425 State St., Binghamton, N. Y.

A Family Fight

Two locals of streetcar union jockey for labor control in merger of San Francisco's public and municipal traction systems.

When San Francisco voters last spring authorized the city to buy the Market St. Ry. system for \$7,500,000 and merge it with the municipal system which operated on parallel tracks in Market St., Mayor Roger D. Lapham was credited with a master stroke in efficient municipal management (BW—May 27 '44, p. 76).

• **Unions Kicked**—Lapham, the steamship executive who distinguished himself as an employer member of the National War Labor Board, ran into trouble in an unexpected quarter—labor.

Employees of both lines were members of the same A.F.L. union—the Amalgamated Assn. of Street, Electric Railway & Motor Coach Employees of America—the city workers in Local 518 and the public utility workers in Local 1004. Local 518 had about 1,100 members, all operating employees; Local



'ROUND AND DOWN

The versatile bulldozer adds a novel job to its bag of tricks by digging a 46-ft. well for the new Columbia Metals alumina plant at Salem, Ore. Starting with a 56-ft. circular cut, the 'dozer excavated 350 cu. yd. of earth which was removed through a side entrance. Seepage at 38 ft. required pumps to assist the machine.

104 had about 1,500, including machinists, electricians, and other craftsmen in addition to operating crewmen. **Wage Rates Differed**—When the city took over, Local 1004 had to release about 400 nonoperating craftsmen to appropriate A.F.L. craft unions. It put the two locals on an equal footing as to size, but hourly wage ranges differed:

	Municipal	Market St.
Machine workers.	90¢-97½¢	85¢-92½¢
Operators ...	95¢-\$1.02½	90½¢-97½¢

Lapham proclaimed that the incoming workers would be placed under the terms of the municipal civil service commission and enjoy the same rate of pay and seniority as old city payrollers.

Union in Court—Local 518 (municipal) balked. A committee went to court to force the newcomers to the bottom of the seniority list and the bottom of the pay ranges. Although the municipal wage is higher, this would have involved wage cuts for those Market St. Ry. employees receiving top rate in their range. The court decided against the petitioners, and the city workers plan an appeal. Meanwhile, however, the civil service commission refuses to certify the new city employees for anything more than the minimum rates.

The parent union is said to be considering a merger of the two warring locals.

STRIKERS PENALIZED

Drastic action has been taken by the fourth regional war labor board against International Assn. of Machinists (A.F.L.) local and 500 strikers at the Combustion Engineering Co., Chattanooga, Tenn. When I.A.M. leaders said they could not end the wildcat walkout, the board ordered the company to suspend negotiations with workers. The board wiped all pending cases brought by the local from its docket, an unprecedented action taken because its members "will not honor an agreement reached at pistol point in wartime." In the case, which has delayed production of secret war equipment, will be referred to Washington if workers continue their walkout, the board warned.

FOREMEN'S NEW CONTRACT

Foreman's Assn. of America has signed a contract, its second, with the S. Stove Co., Ypsilanti, Mich., providing that the company recognize the association as sole bargaining agent for foremen and assistant foremen, and that the F.A.A. agrees not to affiliate with any other union, and to recognize the right of management and the general superintendent to hire, discharge, appoint, or promote any foreman.

HOW AN ELECTRIC TRUCK Doubled Production!



Mechanized Handling Cuts Costs

● Many executives are discovering in wartime how the use of electric trucks speeds production and cuts costs.

Take the case of a plant where concrete blocks are moved from molding machines to curing furnace. Formerly the blocks were placed on skids and moved to the furnace on a hand truck. This method of material handling required a crew of seven men.

Now the blocks are picked up in unit loads by an electric truck and moved from molding machine into the curing cylinder. After curing, they are moved to storage in the same way. This mechanized method of material handling requires only three men, releasing four others to do vital work in the plant. It doubles production.

This electric truck paid for itself in slightly more than six months. In addition, it eliminated the grueling task of manual handling.

When W.P.B. restrictions on the manufacture of electric trucks are lifted, many industries plan to use these machines to cut peacetime production costs. Before you complete your post-war plans, investigate how electric trucks speed production, cut cost of handling in-bound and out-bound shipments, make more efficient use of storage space, reduce handling accidents and damage.

To keep abreast of latest developments:

FOR MANAGEMENT: "Unit Loads" Bulletin explaining a coordinating materials handling system that involves practically every industry.

FOR TRANSPORTATION SUPERVISOR: "Material Handling" Handbook containing vital information necessary to the conduct of efficient inter-department operations.

THE INDUSTRIAL TRUCK STATISTICAL ASSOCIATION
208 South La Salle Street • Chicago 4, Illinois



MANUFACTURERS OF TRUCKS: AUTOMATIC, BAKER, CRESCENT, EASTON, ELWELL-PARKER, LEWIS-SHEPARD, MERCURY, YALE. BATTERIES: EDISON, EXIDE, PHILCO. BATTERY CHARGING EQUIPMENT: ELECTRIC PRODUCTS, HERTNER.

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- ★ **Rauland Microphones**
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RAULAND VISITRON TUBES ARE NOW IN PRODUCTION AND AVAILABLE

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RADIO...RADAR...SOUND...COMMUNICATIONS
Rauland employees are still investing 10% of their salaries in War Bonds
The Rauland Corporation . . Chicago 41, Illinois

Nursing for Safe

Specialists in hazardous modern industry find increasing acceptance. Plants now employ 12,000 industrial nurses.

The steady growth in size and prestige of the American Assn. of Industrial Nurses since its formation two years ago attests to the coming of age of industrial nursing. The association is launching a drive to increase its present membership of 2,500 to include the 12,000 industrial nurses in the United States.

• **Hazards Increased**—Management is increasingly recognized in recent years that a healthy employee is a more efficient and better adjusted worker. It took the necessities of war production and the pinch of manpower shortages to bring the situation sharply into focus. Development of new processes and operational techniques has brought new industrial hazards, and only constant attention keeps them from getting out of hand and gumming up production.

The influx of older personnel, war-disabled workers, and young women into war plants has necessitated additional health supervision.

• **Slow in Rooting**—The Vermont Marble Co. employed the first graduate industrial nurse in 1895, but industrial nursing service continued to be rare even after workmen's compensation insurance legislation made safety engineering and medical service economic.



Splinter-removing is almost an everyday operation for the 12,000 industrial nurses who staff dispensaries in the nation's mills and factories.

Safe...ly desirable in the first two decades of the century.

In 1941 there were only 5,500 industrial nurses in the country. Insurance companies writing industrial policies—probably the Metropolitan Life Insurance Co.—had nurses to visit policyholders and advise them on health and sanitation problems.

The Employers Mutual Liability Insurance Co. some 15 years ago set up a consultative nursing service whereby nurses trained in industrial hazards, occupational diseases, and other disabilities peculiar to various industries went into plant medical departments to train company personnel.

Exchanging Ideas—In addition to fostering specialized academic training, the A.A.N. is seeking to raise the caliber of nurses in industry by exchanging professional ideas and experience. Special courses have already been started at New York University, St. John's College in Brooklyn, Simmons College in Boston, the University of Minnesota, and in half a dozen schools of nursing.

In 1942 a special committee of the Public Health Assn. made a survey of 924 plants employing some 2,500,000 workers, with 3,207 nurses. The committee found that conceptions of "nursing" service varied widely from industry to industry, but that in most cases industrial nurses were charged with organization and maintenance of medical department, day-to-day treatment of occupational diseases, care of emergency cases, assisting the plant doctor if any, safety education and accident control, and participation in employees' welfare programs.

Manufacturing industries employed 34% of industrial nurses, the survey revealed, with the iron and steel industry leading the field in the number of plants having such service. Connecticut, Indiana, Illinois, Texas, and Ohio had the highest percentage of nurses in relation to the number of industries.

WJJD DISPUTE GOES BACK

Final action on James C. Petrillo's "pancake turner" dispute at radio station WJJD, Chicago, was postponed again last week when the sixth regional war labor board referred it back for collective bargaining with the station's new owner, Marshall Field.

A strike occurred last Apr. 13 when WJJD refused to hire additional pantake turners—men who put transcriptions on the turntables and take them off (BW—May'64,p100). On Aug. 13, a panel of the regional board denied the request of Petrillo's A.F.L. American Federation of Musicians for employment of three musicians for turning records. The report found that the sta-

Stop Blinking

ONCE AND FOR ALL WITH...



Blinking and flickering of dying fluorescent lamps cannot possibly recur with G-E Watch Dog Starters. When this annoying condition occurs the Watch Dog stops blinking once and for all by cutting itself out of the circuit. Since there is no flow of current futile and needless starting attempts are prevented.

The Watch Dog's positive no blink feature not only prolongs the life of the starter but safeguards the ballast, conserves current and reduces maintenance. Install G-E Watch Dog Starters now and forget all about annoying blink and flicker.

Would you like to have further details about the G-E Watch Dog? Just fill in and return this coupon.

Hear the General Electric radio programs: "The G-E All Girl Orchestra" Sunday 10 P.M. EWT, NBC. "The World Today" news every weekday 6:45 P.M. CBS.

**BUY WAR BONDS
AND KEEP THEM**

Appliance and Merchandise Dept.,
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Gentlemen:

Please send me your bulletin "How to Use G-E Fluorescent Accessories for Best Lighting Results."

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GENERAL  ELECTRIC



YES, when industry gets that order, it means that our boys will soon be coming home with victory in hand and a job in mind. And the jobs will be here—because industry will change back to peace production as fast as it went to war.

And in the change-back, AIR EXPRESS will continue to perform a service that has become indispensable to industry—the high speed delivery of critical material that keeps production at peak efficiency. Yes, there's a use for AIR EXPRESS in every business—and after the war, business will find this service greatly expanded for reaching world-wide as well as domestic markets.



SPECIFY AIR EXPRESS
A Money-Saving, High-Speed Tool
For Every Business

With additional planes and space available for all types of traffic, 3-mile-a-minute Air Express directly serves hundreds of U.S. cities and scores of foreign countries. And shippers nationwide are now saving an average of more than 10% on Air Express charges—as a result of increased efficiency developed to meet wartime demands.

WRITE TODAY for "North, East, South, West"—an informative booklet that will stimulate the thinking of every executive. Dept. PR, Railway Express Agency, 230 Park Avenue, New York 17, N. Y., or ask for it at any local office.

AIR EXPRESS
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Representing the AIRLINES of the United States

tion's present staff does not have enough work to fill in the minimum of 25 hours a week specified in the union contract.

The board approved the union's request that a minimum of ten musicians be retained.

If A.F.M. and Marshall Field reach no agreement within 60 days, either party may refer the case back to the board for final determination.

OVERTIME PLAN ALTERED

Where employees are paid on a piece rate basis, overtime payments must be computed by multiplying by time and one-half either the average hourly earnings for the week or an agreed-upon fixed piece rate. Consent judgments to this effect in three test cases have been entered in U. S. District Court, St. Louis.

The cases, which apply to 82 garment manufacturers in the St. Louis area, were brought by the Wage & Hour Division of the Dept. of Labor against the Leader Garment Co., Paul Sachs Originals, Inc., and the Irene Karol Dress Shop. An estimated \$200,000 in annual wage increases will result.

The St. Louis clothing industry had been working under an agreement made in 1941 between the Associated Garment Industries of St. Louis and the International Ladies Garment Workers' Union, under which a fixed hourly rate (81¢ for operators and \$1.06 for pressers) was used as a basis for payment of time worked beyond 40 hours a week.

JOB AID FOR SEAMEN

Seamen who left peacetime jobs after May 1, 1940, to enter the merchant marine will be helped by the War Shipping Administration if they elect to return to former jobs after the war. Those who plan to go back to permanent jobs for which they are still qualified will be given certificates under Public Law 87 establishing their eligibility for re-employment rights. Application must be made to WSA within 30 days after release, and certificates presented to employers within 40 days after issuance.

NWLB LOOKS AT RECORD

National War Labor Board this month begins its third year of wage stabilization work under the Stabilization Act of 1942 with 16,872 voluntary cases awaiting settlement (about four weeks' work at the current 4,262 cases a week) and a backlog of 2,942 slower dispute cases (about 19 weeks' work at 153 cases a week). In two years the board settled 282,426 voluntary and 9,983 dispute cases.

THE WAR AND BUSINESS ABROAD

BUSINESS WEEK

OCTOBER 21, 1944



You can expect a steady crescendo of action in the Pacific during the next two pre-election weeks.

The battering Formosa raids are stage settings for invasion of the Philippines, planned since late last summer (BW—Aug. 5'44, p111).

Gen. MacArthur, accompanied by high Philippine officials, will land with the invading forces—a symbol of the return to the Far East of American power and authority.

But our inability to force the Japanese fleet into a major battle early this fall probably means that Manila cannot be attacked until bases are captured farther south in the Philippines.

Churchill, at Quebec, demanded a place in the Far Eastern limelight for Britain and probably was offered the vast mop-up job in the southwest Pacific. Once American forces occupy the Philippines and make landings on the China coast which effectively cut Tokyo's tenuous supply lines to the Netherlands Indies, French Indo-China, and Malaya, British-American forces can be expected to strike from India and Ceylon.

Both the French and the Dutch are insisting on a face-saving place in the liberation of their colonies, and this demand will be satisfied.

Don't miss the significance of Russia's pattern of battle in eastern Europe.

Aware that London is boldly maneuvering for vast spheres of influence—in Iran, Greece, Ethiopia, and the Far East—and that other colonial powers—including the U. S.—are planning a vigorous expansion in the Pacific, Moscow is pushing its own expansion program.

While the battle at Warsaw lags, Russia is systematically mopping up in all territories to be annexed to the Soviet Union—currently the Baltics—and winning new strategic strength in territories to be dominated by Moscow—currently Finland, Yugoslavia, and Hungary (BW—Jul. 22'44, p111).

Arrival of large numbers of Soviet troops in foreign territory has forced Moscow to fix local exchange rates for the ruble **which may mark the entry of the ruble into the world exchange markets.**

All of Russia's foreign trade heretofore has been conducted in the currency of its customers or suppliers.

Incidentally, don't think the last word has been spoken in the issue created by Russia's application for oil concessions in northern Iran, and Teheran's refusal to make a deal.

British interests, solidly entrenched in the rich Persian Gulf oil fields in the south, will pay almost any price to keep Russian operators out.

Iran will be a tinderbox of the first order as soon as the wartime honeymoon of the big powers ends (BW—Dec. 18'43, p63).

Sweden felt the iron hand of the United Nations recently.

About the same time that delivery of foreign mail to Sweden was suddenly stopped, Stockholm was reminded that neutrals also are expected to make sacrifices to help win the war against the Axis. As a result, **the Swedes announced this week that all ball bearing shipments to Germany have been stopped.** Presumably foreign mail deliveries are being resumed.

Don't be surprised if Washington steps up its pressure on Argentina.

The British have not renewed their meat contract with Buenos Aires;

THE WAR AND BUSINESS ABROAD (Continued)

BUSINESS WEEK

OCTOBER 21, 1944

since Sept. 30, they have been operating on a day-to-day basis, with no British ships arriving at Argentine ports except to pick up meat for Britain.

If the major battles with Germany are ended this year, as expected, and food supplies become more abundant in England, it should not surprise you if a full economic embargo is applied to Argentina toward the end of the year. This would coincide with the harvests already blighted by drought, and with unusually heavy slaughtering caused by the shortage of fodder.

And it would follow drastic slashes in this country's purchases of such strategic materials as tungsten, lead, and antimony.

In the scramble for postwar trade, new patterns are developing.

The **Dominican Republic** will have its first textile mill when a factory, now under construction, is completed early in 1945. It will be equipped with secondhand machinery purchased at Atlanta, Ga., for about \$86,000.

Brazil, on the other hand, is being deprived of immediate delivery of secondhand textile machinery purchased recently in Alabama. The War Production Board has forbidden dismantling of three mills, and has placed orders for 3,000,000 yd. of cotton cloth (BW—Oct. 14 '44, p54).

It has been revealed in Brazil that the **government textile mission which recently visited the U. S. placed orders for 2,500,000 spindles for immediate delivery, and plans to purchase another 6,500,000 during the next twelve years.** In the past, Great Britain was the principal supplier of Brazil's textile equipment.

Chile has recently announced the purchase of U. S. turbines and other equipment for three large hydroelectric plants to be built in the southern part of the country (BW—Jan. 1 '44, p44).

A new factory to manufacture electric equipment will soon be completed at Sao Paulo, **Brazil**; will employ 3,000; and will produce—among other items—refrigerators and radios.

Also, the Sao Paulo Chamber of Commerce has just announced that local industries now produce 33 major types of rubber products, ranging from automobile tires to erasers.

Look for long and bitter debates when the International Civil Aviation Conference meets in Chicago, beginning Oct. 30.

Objective: to work out a pattern of international reciprocity modeled more or less on the principles which govern domestic public utilities, according to which a limited number of utilities operate under official supervision.

Most nettlesome problem: to find a formula which will allow planes transit over foreign territory without interfering with military security.

U. S. and British businessmen have not been alone in their eagerness to renew old commercial contacts in Paris.

J. S. Duncan, president of Massey-Harris, Ltd., big Canadian farm machinery firm, has reportedly been stalled in London en route to Paris where he handled Massey-Harris affairs before the war.

What almost made the visit appear legitimate was the fact that Duncan is Canadian member of the Combined Agricultural & Food Machinery Committee of the Combined Production & Resources Board. The catch, however, was that he was not traveling on committee business.

BUSINESS ABROAD

African Headway

Industry in South Africa enjoys wartime boom, but looks to government for protection in postwar years.

JOHANNESBURG—Contact with American suppliers in wartime has stimulated trade between the U. S. and South Africa, but how far the business will be increased after the war remains an open question. Much will depend on how quickly American manufacturers can catch up on their orders and on the attitude of the South African government toward protection of newly developed secondary industries.

Protection Pledged—For years, official policy has been to protect light manufacturing, and Sidney Waterson, minister of Economic Development, recently reiterated this stand in a promise to encourage every branch of industry that could be regarded as based on sound economic foundations. He indicated, however, that industry must increase its efficiency and raise its standards to meet those set by foreign manufacturers.

Industries Grow—South African industry has made rapid progress during the war, attempting to meet increasing consumer demand at a time when imports of traditional foreign products have been cut off or curtailed.

War demands for military shoes and uniforms have given the leather, boot, and clothing industries a firm backing. South African canned foods have followed Allied troops into battle. Cement, steel, and other elementary construction materials have been exported to the Far East for defense installations.

Imports Increase—Trade statistics are still unavailable in detail, but recent months have witnessed an increase in imports of all kinds. During 1943, the United States shipped only 500 tons of civilian supplies to the Union, but during the first half of 1944 imports in this category reached 340,000 tons. The ratio of civilian goods to military supplies was one to four in 1942; now it is about three to two.

Before the war the U. S. supplied between \$64,000,000 and \$100,000,000 of goods yearly to South Africa. The chief items were motor vehicles, chassis, electrical machinery and apparatus, other machinery, and clothing. A substantial backlog or demand for these products has accumulated during the

war, and will last some time even after war controls are lifted and civilian production restarted.

• **Turn to U. S.**—Simple farm equipment is now manufactured in the Union, but for all heavier types the buyer must turn to the United States or other Empire sources. Before the war the United Kingdom exported about \$160,000,000 of goods to South Africa, and wartime accumulations of sterling exchange will encourage trade with the U. K. once shipping and goods become available.

Wartime trade with the Argentine has been characterized by spectacular expansion and equally precipitous contraction. Traders turned to the Argentine as all other sources were diminished, and the market was flooded with textiles and crockery of mediocre quality selling at high prices.

• **Argentina Snubbed**—Before the war Argentina exported less than \$1,200,000 of goods to the Union each year, but in the period July, 1942, to July, 1943, boosted the figure to an estimated \$40,000,000. During 1944, for political and other reasons, Union imports from Argentina have slumped drastically. Although total Argentine exports increased one-third in value during the first half of 1944, exports to South Africa declined by nearly 60%.

Accusations that Argentine exporters exploited South Africa's need have been made, and Argentina has reportedly revoked export privileges of some transgressors. Freight rates, already considered high, were also "accidentally" boosted from 250 to 350 pesos a ton for shipments of cotton goods. A few experiences of this sort have caused some Union businessmen to decide on bypassing the Argentine deliberately once other markets are opened.

Mexico Irrigates

Program is speeded with larger funds, more government backing; 500,000 acres added during the past two years.

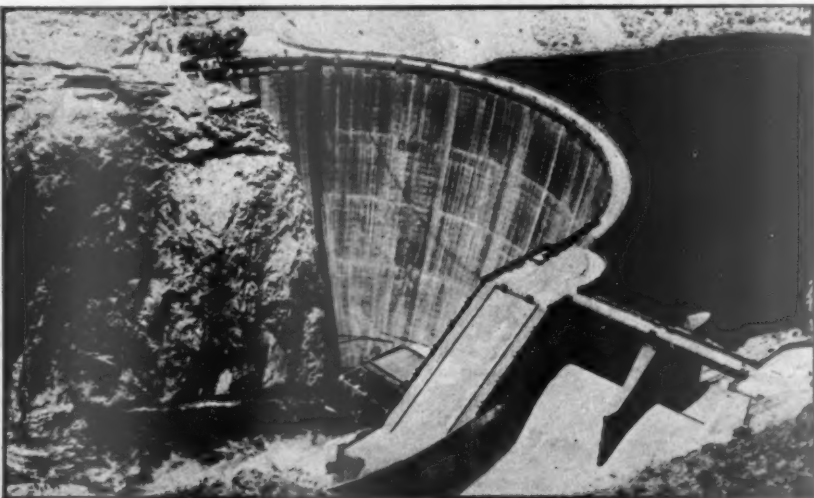
MEXICO, D. F.—High ranking in Mexico's development plans is its \$200,000,000 irrigation program, started 18 years ago under President Calles with the formation of the National Commission of Irrigation. This program is now being speeded up considerably.

President Avila Camacho revealed recently that the commission irrigated as much land during the first three years of his administration as during the 14 years from 1926 to 1940.

• **Tablelands Are Dry**—The most populated regions of Mexico—the high tablelands—are also those where rains are scarcest. Only 3,000,000 acres of a total of 36,000,000 acres of cultivable land receive sufficient rain to sustain profitable farms.

For a long time, public authorities paid little attention to irrigation. It was only in 1926 that the Mexican government began to plan for the eventual irrigation of 10,000,000 acres. The new agency was faced with the choice between long and difficult studies of its problems and immediate action. Calles decided that work should begin immediately, and construction of four large dams was started during his term of office. Only two of these proved successful.

• **Funds Increased**—The first steps had been taken, however, and each successive government earmarked more money for irrigation purposes: \$2,000,000 un-



The two-year-old La Angostura Dam in the State of Sonora is typical of the 15 waterway projects completed by Mexico's National Commission of Irrigation.

der Calles; \$8,000,000 under Cardenas; and \$14,000,000 so far under Avila Camacho. Before the commission was set up, about 1,000,000 acres were irrigated in Mexico. Since 1926, 1,200,000 acres have been irrigated—an area equivalent to one-eighth of all the irrigable land in the country.

Costs of installing an irrigation system are high—between \$40 and \$80 an acre—and are advanced by the government; charges to landowners do not approach total outlays. This year the commission will spend about \$22,000,000, an amount equal to 10% of all government expenditures. So far \$25,000,000 in irrigation bonds have been floated, \$7,000,000 refunded.

• **Total of 43 Dams**—Not counting a large number of small irrigation projects (totaling some 180,000 acres and costing about \$14,000,000), the commission's program calls for 43 dams, of which 15 have already been completed. The eight largest, some of them still under construction (map, below), will irrigate nearly 2,000,000 acres involving total appropriations of over \$100,000,000.

The Valsequillo project (BW—Feb. 12'44,p109), involving construction of the \$2,000,000 Devil's Balcony dam and a \$10,000,000, 7-mi. tunnel, is progressing on schedule. Work is being done by Compania Constructora Rosoff, a subsidiary of Rosoff Subway Construction Co. of New York, and American bulldozers and other machinery are speeding the project, due to be finished in 1946.

• **Much Criticism**—Two other big projects, El Palmito and El Azucar, started under Cardenas, are still far from finished.

The dam at El Palmito, however, was completed in time to save many lives and millions in property when the Nazas River flooded last month.

Although Mexicans recognize the long-range importance of irrigation, they find plenty to criticize in the current work of the irrigation commission and the agricultural policy pursued in watered areas. They insist that the government encourage cultivation of cheap crops of corn, wheat, and beans on the costly land, instead of higher-profit crops. Also, it is claimed that too much attention is paid to irrigation and not enough to the attendant problems of drainage.

• **To Speed Work**—The government is proud of its record during the two years that ended last April, in which 500,000 acres were provided with irrigation, and it intends to get as much more done as possible between now and September, 1946, when the term of Avila Camacho expires.

NEW POWER FOR AUTOS

A Soviet engineer—Georgi Babat—is reported to have developed recently a motor vehicle which receives its power from electric wires laid beneath the surface of the street. No contact with the wire is necessary.

This is one of the nonmilitary products of Soviet wartime research, conducted by more than 25,000 scientists and engineers working in 700 universities and 900 research laboratories at a cost, in 1944, of about \$1,000,000,000. Since 1941, more than 1,000 scientists have received Stalin prizes for their contributions to the Russian war effort.

CANADA

Co-op Showdown

Wheat pools prepare for taxation threat by reducing the income and increasing price paid to farmers for grain.

OTTAWA—Whether cooperative should be subjected to the same tax treatment as other companies—a long political-economic issue in Canada for years, just as it is becoming in the United States (page 29)—may be forced to a showdown by action of the western wheat pools in cutting handling charges on coarse grains from 1½¢ a bu. to 1¢ and raising the price they pay for wheat at rural elevators above prices fixed by the Canadian Wheat Board.

• **Same Effect**—The price boost on wheat has the same effect for growers as the reduction in handling charges on coarse grains, since the pools are passing on to farmers 2¢ out of 3¢ a bu. allowance for handling by the wheat board. For the past year the federal government has been absorbing handling charges on wheat as a war measure.

Private grain companies are compelled to meet the new prices and handling charges in order to stay in business. This subjects them to a serious and possibly fatal—price squeeze on operating revenues and profits.

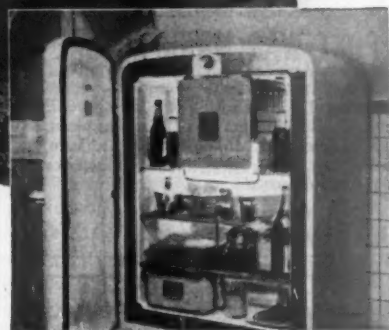
• **Tax Move?**—The pools claim their action is in line with their policy of



Mexico's long-range irrigation plans provide for watering about one-third of the nation's arable land. About 20% of

all the government's spending now goes for irrigation chiefly for work on the eight biggest projects.

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ducing costs to farmers whenever possible, and that their financial statements show that previous charges were higher than necessary. The move is seen, however, as aiming to cut profits of the pools as a precaution against the possibility of their being compelled to pay federal income and excess-profits taxes.

It has been recalled, for instance, that when private business was pressing for taxation of the pools two years ago, a prominent pool official stated that if Ottawa decided to tax them they would not be caught in a taxable position for more than the year in which the decision was made.

● **Assessments Made**—Recently the Federal Revenue Dept. assessed pool earnings for purposes of taxation, and these estimates are under fire from the pool. This preparatory step is not taken too seriously in Canada, since it is doubtful that Ottawa would try to make the

assessments stick in an election year.

Ottawa is pledged to assist the development of small and medium-size business enterprises, and it is likely that the demise of wheat operators forced out of business by cooperative pools will bring prompt federal action. The question remains as to how Ottawa can put the co-ops on an equal footing with other business if they are determined to dodge taxes by reducing earnings.

SEEKING NEW USES

Canada's war-expanded aircraft industry, scheduled for a 90% to 95% cutback at the end of the war, is searching for new uses for its plants, equipment, and trained personnel.

Fairchild Aircraft, Ltd., has notified shareholders that it is investigating other possible lines of activity in order to keep its organization going between the date



FOOD FOR FIGHTERS

Victory gardens started by garrison troops on Guadalcanal (BW—Jul. 1'44,p26) are burgeoning into sizable truck farms that turn out fresh vegetables (above) for U. S. armed forces in the Pacific. Under military overseers, native field hands till the rich tropical soil to produce several crops a year. And at one plantation a tribal chief wears G.I. sergeant's stripes while proudly driving an American tractor—barefooted (right). Crops that are produced on these farms, which save uncounted costs as well as precious amounts of shipping space, include: cabbage, corn, eggplant, radishes, cucumbers, onions, tomatoes, watermelons, and cantaloupes.



cutbacks and clarification of aviation's postwar outlook. Fairchild's contract with the U.S. for Curtiss dive bombers has been reduced and will be completed by the end of winter. The government-sponsored committee investigating the future of the industry has recommended government to assure Canada's position as a producer.

Major event along this line has been the assistance in securing manufacturing rights for the Douglas DC-4 transport (BW-Apr. 14, 1944, p. 112). Since the rights were obtained, the design has been altered to permit use of British and Royce Merlin engines in place of Pratt & Whitney engines made in U.S. A contract for 50 of these transports was given to the Canadian Aircraft Co. for the government-owned plant it operates at Montreal.

SIGNMENT FOR HOWE

As predicted (BW-Oct. 14, 1944, p. 121), Canada has put Munitions & Supply Minister C. D. Howe at the head of the Reconstruction Dept.

At the same time, Prime Minister Mackenzie King announced establishment of a Dept. of Veterans Affairs, and Ian Mackenzie, Minister of Penitentiaries & National Health, and a Dept. of National Health & Welfare, under the late Claxton, parliamentary assistant to the prime minister. The Reconstruction Dept. is listed as a temporary, transition-period agency, the other two as permanent additions to the Canadian administrative setup.

Under reconstruction, Canada places the problems of reconversion and attainment of postwar full employment. Housing development and industrial research will also fall within the jurisdiction of the new department.

NADA BUILDS SHIPS

Canadian shipyards have built nearly 10,000 tons of shipping since the end of the war, the bulk of it for the United Kingdom or sale to the United States.

Canada has launched more than 300 destroyers of 10,000-ton rating. Two of these were sold to the United Kingdom and 90 to the U. S. Another 100 were made available to the U. K. under Canada-Mutual Aid. The remainder have been operated by Canadian companies under the general direction of the United Nations shipping pool.

In addition to these standard freighters, Canada has built 4,700-ton cargo ships and 3,600- to 10,000-ton tankers. A number of these have also been sold to other warring nations, including Australia.

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THE MARKETS

(FINANCE SECTION—PAGE 72)

For some time daily trading on the New York Stock Exchange has been pretty featureless except for the high degree of selectivity on the buying side and the partial renewal of speculative interest lately in certain low-priced shares.

• **Hopes Fade Quickly**—On Wednesday of this week the market did show some definite signs of price strength, and some of the Wall Street bulls almost permitted this to beguile them into believing that the industrial and rail stocks might finally be getting ready to stage a serious testing of their mid-July 1942-44 bull market highs.

Such hopes didn't last long. Wednesday's price strength awakened no real response from the vast number of investors and traders who have been on the sidelines since last summer waiting to see what happens. The market quickly relapsed into somnolence.

• **Developments Awaited**—Most Wall Street observers believe that the present "wait and see" attitude will continue until there is some clean-cut domestic or foreign development of sufficient importance to force a change.

The Street believes that the first and most obvious development that might cause stocks to break out of their present stagnation is a change in Administration. Many Wall Streeters believe that the uncertainties on that score, rather than the war, are largely responsible for the status quo and that the market lately has been indicating that it doesn't see much chance of a shift.

• **Opinions Vary**—Others in the Street, however, feel very differently in this re-

spect. Actually, they see the market at least a bit hopeful of a change in Washington, and to prove their point, they call attention to the rise that has taken place in utility stocks recently.

They do agree that the election of Governor Thomas E. Dewey would send stocks up sharply. But they are not certain that the same thing would happen should President Roosevelt be re-elected since such news, they believe, would immediately regenerate inflation fears that have been smoldering under the surface for some time.

Wall Street's new-issues market currently shows every sign of having the busiest week seen in the financing field since April, 1936, when the underwriting houses were enjoying a terrific volume of utility refunding business.

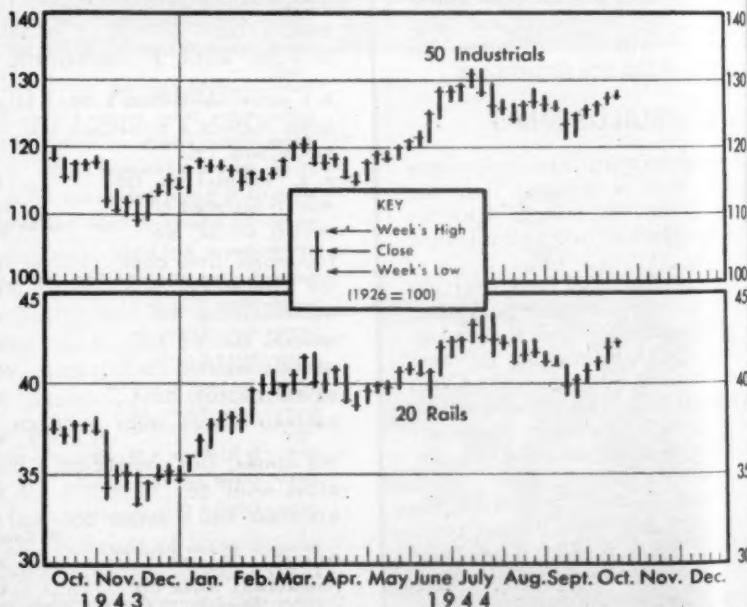
• **Big Offerings**—On Wednesday alone a Halsey, Stuart & Co. syndicate of 160 members was engaged in the offering of \$155,000,000 of Commonwealth Edison Co. bonds and another group of 95 members was having its hands full with \$33,000,000 of new Los Angeles bonds.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial ...	127.6	127.5	124.8	117.7
Railroad ...	42.3	42.0	40.2	37.8
Utility	56.5	55.7	54.7	50.8
Bonds				
Industrial ...	120.1	120.0	120.2	118.4
Railroad ...	109.7	108.9	107.1	98.5
Utility	116.9	116.8	116.4	115.4

Data: Standard & Poor's Corp.

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

© BUSINESS WEEK

THE TRADING POST

Cutbacks and Public Relations

Speaking before a Los Angeles executives conference on public relations, H. Kindelberger, president of North American Aviation, recently offered an unusually keen analysis of the public relations involved in war contract termination and discussed its application to his own company's operation at Dallas. Kindelberger said that I have room here for only one extract from his discussion:

We have always believed that there would be a time when a change in war would require the various procurement agencies of the government to cut back or terminate contracts at a very rapid rate, which would leave very little time for preparation. We are thinking more in terms of days and weeks than months and years. It is also our feeling that in order for us to do a proper job of terminating a contract, we would have to know all that there was to know about the operation of such termination.

From a purely accounting and operational standpoint we set up a termination board to find out all about termination, keep track of all the various laws, rules and regulations. This group, after it was set up more than a year ago, formally terminated many small contracts. We then had a system for handling such terminations well developed and we were completely familiar with rapidly changing rules and regulations at any particular time. This enabled us to act quickly.

Along with the development of purely industrial operations to handle terminations, a public relations department was studying the various things that would affect the communities, our employees and all other people when such terminations hit us. We felt that we must keep our house in order and be ready at any time to act intelligently and quickly and with due regard to the effect on the communities in which we operate.

As an example of the results to be obtained from such planning, our Dallas B-24 termination involved the cancellation or reduction of about 4,500 separate purchase orders affecting a total of 436 suppliers and subcontractors. Our total outstanding purchase commitments to suppliers on the B-24 program, estimated at \$21,000,000, were reduced by the partial termination to about \$6,000,000. The contract termination staff of our Dallas organization, which had been set up and prepared for such a task, dispatched telegrams to each of these suppliers advising them to stop work immediately and to send receipt of further instructions. These telegrams were in the hands of our suppliers the same day that public announcement of the cutback was carried in the press. Our public relations problems at Dallas are certainly not identical to those which we are faced by any other manufacturer in the other community on the occasion of contract cutbacks or terminations. In the

first place, no two local situations are exactly alike. Second, termination arrangements and effects will probably never be the same at two plants.

* * *

At the time of the notification of the government's plan to cut back the Liberator production, total employment at both plants was more than 34,000. The cutback in the program came at a time when we were already manufacturing, in some departments, units beyond the total reduced number then to be built. Therefore, it was necessary that we immediately lay off 3,400 people.

Our calculations were rapidly made and showed that we would have to reduce our force by 17,500 people within 90 days. You can imagine what this meant to a city like Dallas which employed less than 17,000 people in all industrial pursuits when our first plant was started there. The effect on the community is that which would occur in Los Angeles were the operations of Lockheed, North American, Northrop and Douglas El Segundo to be completely and simultaneously discontinued.

Our public relations actions at Dallas, following the notice of the contract cutback program, were obviously designed to lessen, as far as possible, the hardship caused our employees and the community. It was further necessary that we maintain and if possible improve all of our local relationships in order that we would be enabled to carry out our remaining war production as efficiently and effectively as possible. It was also necessary that we serve, by word and action, the interests of war production in Dallas and the surrounding region. This purpose recognized our responsibility to the nation in time of war. We felt it was our duty to help channel available manpower into essential industry, maintain community interest in the war production jobs still ahead, and do everything else within our power to serve the war effort.

Naturally, many public relations policies and actions at termination time serve these purposes. For instance, it is in the interest of both the company and the war effort that information on the effects of the cutback or termination be given to supervision, employees, subcontractors and the community, in such a manner that most vitally concerned parties get the full facts before they receive dangerous misinformation from rumor or ill-considered public statements by uninformed sources.

The company suffers from public misunderstanding if rumor and misinformation are permitted to gain headway, and the war effort is damaged by the resulting shift of workers from essential work and by a general let-down in war resolve in a community. I repeat that I do not have a final answer to any company's individual problem, and certainly I have no neat package tied in blue ribbon, labeled "Public Relations Plan—Do Not Open Until Termination of Contract" which you can take away with you and tuck inside a file until needed.

W.C.



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THE TREND

CORNERSTONE AT DUMBARTON OAKS?

Announcement of the Dumbarton Oaks proposals for a world security organization has been greeted by a reticence that is dangerous, whether it be respectful or cynical. History might be called upon to justify either attitude toward the effort, but it could never justify silence as to the results. And silence is least golden when the results are still tentative. We had better speak out before our listeners' ears become cobwebbed by such myths as were spun from Versailles.

• **One warning should be unnecessary.** From the agony of the years since Versailles, we must surely have learned that we do not "make" peace as we might make a contract—at a sitting, in one completed action. We make it as we make war—day after day, by sustained planning and continued action. No man who has lived through the past 25 years will expect ever to look back to 1944 and say that we "made peace" at Dumbarton Oaks.

It might remain less evident that we do not make peace by mere political arrangements, however much sustained effort we may put into implementing them politically. Given any amount of political goodwill, the League of Nations machinery could not have functioned on the cracked economic base which was laid for it. Peace is a matter of peace-making economic relationships which are scarcely mentioned among the Dumbarton Oaks proposals.

Small nations may be coerced from taking up arms against economic dissatisfaction. So may large ones as long as they can be kept weak and isolated, though demonstrably that is not often for very long. But a first-class power will inevitably seek to have its individual economic way by conquest or domination, unless it can be shown a common way.

• **Dumbarton Oaks has set up arrangements** by which the big powers can police the small ones—and hold them in economic bondage if so desired. It has only hinted at a program to maintain peace among the United States, Great Britain, and Russia. Obviously, no piece of political machinery can accomplish that. Peace among the Big Three must be the result of a skillful and imaginative development of common economic interests strong enough and mutually profitable enough to make each prefer a compromise of any differences to a conflict which would rupture such relationships.

To that achievement, which must be carried through in the area of trade, tariff, monetary, financial, industrial, agricultural, and labor agreements, there is no peace-keeping alternative in elaborate political machinery, even in the benign superstate of the internationalist's dreams. This is so true that Dumbarton Oaks' debate over such questions as to whether one of the great

powers should have the right to veto joint action against itself as an alleged aggressor seems pure fantasy. We had better get back to reality by recognizing that such vetoes are exercised only at Munich or at Stalingrad and concentrate on what remains to be done if Dumbarton Oaks is not to become the Great Dumbarton House of the quipsters.

• **To be sure, this third major effort** since Napoleon's day to substitute world peace by agreement for world peace by a dictator's conquest is no subject for quipsters. In some ways, it combines the best features of the Holy Alliance and the League of Nations. Like the Alliance, it bluntly recognizes that the responsibility for peace-keeping must be placed where the power is—in the hands of the great nations. Like the League, it provides a forum and protocol for debate to stall action and allow time for compromise, face-saving, and the use of pressure. It, at least, promises more equity than the former and more teeth than the latter.

For all those detailed proposals regarding a Security Council, a General Assembly, an International Court of Justice, and a Military Staff Committee, we can say little more at this date, lest history laugh in our faces. The history of Metternich's Holy Alliance, which may yet be aped by the Big Four (China politely included), stands to remind us of how allies can fall out after they have won a victory that shifts their motivations from alliance. The League's history is a reminder of how clutter of machinery can obscure the true basis of peace.

The basis of peace cannot be found in an array of peace-keeping machinery. And, while power determines victory, all the records of war scoff at a British newspaper editor's comment that he found at Dumbarton Oaks "some fuzzy idealism and much vagueness, but one big workable fact—that peace depends on power." The basis of peace—it cannot be too often repeated, though it has been often proved—lies in sound economic relationships.

• **Perhaps the best hope** for Dumbarton Oaks lies in its final recognition of this "one big workable fact" at the tail-end of the draft. In proposing an Economic and Social Council, it says, "With a view to the creation of conditions of stability and wellbeing which are necessary for peaceful and friendly relations among nations, the organization should facilitate solutions of international economic, social, and other humanitarian problems and promote respect for human rights and fundamental freedoms." The inscription may be somewhat vague and a little pretentious, but if any cornerstone was laid at Dumbarton Oaks, this is it.

The Editors of Business Week

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